

October 14, 2005

Mr. Gene N. Ortega
Exxon Mobil Oil Corporation
3700 West 190th Street, TPT #2-6
Torrance, California 90504

Subject: Remedial Action Plan
Mobil Station 18MLJ
5005 North Long Beach Boulevard
Long Beach, California
CRWQCB Case No. 908050452A

Mr. Ortega:

Enclosed is the remedial action plan (RAP) for the above-referenced site. The RAP proposes the installation of an air sparging/soil vapor extraction (AS/SVE) system to remediate fuel constituents present in the subsurface soil and groundwater. The RAP also contains the details and results from an AS/SVE study that was performed as an interim remedial action at the site.

For any questions regarding the content of this RAP, please call me at (949) 457-8954.

Sincerely,
Environmental Resolutions, Inc.

George E. Salley
Senior Project Geologist
P.G. 6308

Enc: ERI 316305.R04
Transmittal Letter

ExxonMobil
Refining & Supply Company
Global Remediation

3700 W. 190th Street, TPT #2-6
Torrance, California 90504
(310) 212-1870 Office
(310) 212-1890 Facsimile
gene.n.ortega@exxonmobil.com

Gene N. Ortega
Global Remediation
Project Manager

ExxonMobil
Refining & Supply

October 14, 2005

Mr. Noman Chowdhury
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

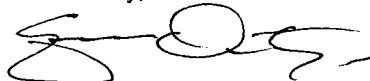
Subject: Remedial Action Plan
Mobil Station 18MLJ
5005 North Long Beach Boulevard
Long Beach, California
CRWQCB Case No. 908050452A

Mr. Chowdhury:

Enclosed for your review is a copy of the remedial action plan (RAP) for the above-referenced site. ExxonMobil Oil Corporation's consultant, Environmental Resolutions, Inc. (ERI), prepared this RAP.

Please call the undersigned at (310) 212-1870 for any questions regarding the content of this RAP.

Sincerely,



Gene N. Ortega
Project Manager

Attachment: **Remedial Action Plan, Mobil Station 18MLJ, 5005 North Long Beach Boulevard, Long Beach, California**, prepared by ERI.

C: w/attachment:
Mr. Jeff Benedict, Joint Powers Agency Long Beach/Signal Hill

C: w/o attachment:
Mr. George E. Salley, ERI

REMEDIAL ACTION PLAN

For

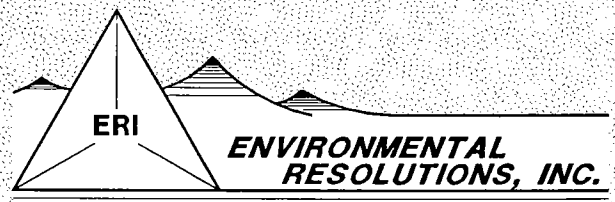
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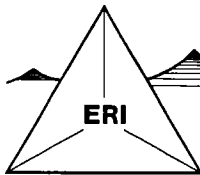
**ERI 316305.R04
CRWQCB Case No. 908050452A**

October 14, 2005

Prepared for

**ExxonMobil Oil Corporation
3700 West 190th Street, TPT #2-7
Torrance, California 90504**





ENVIRONMENTAL RESOLUTIONS, INC.

REMEDIAL ACTION PLAN

For

Mobil Station 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

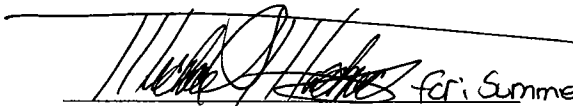
ERI 316305.R04
CRWQCB Case No. 908050452A

Prepared for

ExxonMobil Oil Corporation
3700 West 190th Street, TPT #2-7
Torrance, California 90504

by

Environmental Resolutions, Inc.


Summer Hansen
Staff Scientist



George E. Salley
Senior Project Geologist
P.G. 6308



October 14, 2005

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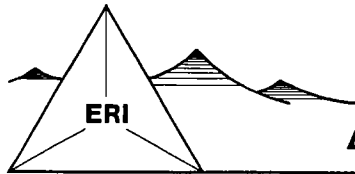
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EXECUTIVE SUMMARY

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) has prepared this final remedial action plan (RAP). Mobil Station 18MLJ is currently an open case with the California Regional Water Quality Control Board – Los Angeles Region (CRWQCB). On March 4, 2005, ExxonMobil submitted an interim remedial action plan (IRAP) to the CRWQCB. The IRAP proposed the installation of four on-site air sparging/soil vapor extraction (AS/SVE) wells and the performance of an AS/SVE feasibility study. This final RAP provides the results from implementation of the scope of work contained in the IRAP and presents a recommendation for active remediation at the site.

In situ AS/SVE causes fuel constituents to volatilize from groundwater to vapor phase where they can be transported to and recovered from the vadose zone. This technology is applicable at sites where permeable soils extend from the saturated zone (to facilitate air injection into groundwater) into the vadose zone (to facilitate capture of the off-gas generated from sparging). In situ AS/SVE requires simultaneous operation of an air injection source (i.e., a blower or compressor) and a vapor extraction system. Air sparging involves the injection of air into the saturated zone below the areas containing fuel constituents. Fuel constituents dissolved in groundwater and adsorbed on soil particles are stripped by the introduced air and become vapor phase fuel constituents. The vapor phase fuel constituents migrate upward to the vadose zone where they are captured by vapor extraction methods.

The results from the feasibility study suggest that an effective SVE radius of influence (ROI) of approximately 44 feet for the deep zone and approximately 34 feet for the shallow zone, and an effective air sparging ROI of approximately 42 feet can be obtained at the site. Based on historical soil and groundwater analytical data, site geology, and the results of the AS/SVE feasibility study, ERI recommends AS/SVE technology as the most cost-effective and technically feasible technology for soil and groundwater remediation at the site.



ENVIRONMENTAL RESOLUTIONS, INC.

REMEDIAL ACTION PLAN

For

Mobil Station 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

1.0 INTRODUCTION

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) has prepared this remedial action plan (RAP) for the above-referenced site (Site Location Map, Plate 1). In a letter to ExxonMobil dated May 9, 2005, the California Regional Water Quality Control Board - Los Angeles Region (CRWQCB) approved the interim remedial action plan (IRAP) proposed by ExxonMobil dated March 4, 2005. The IRAP proposed the installation of four, on-site air sparging/soil vapor extraction (AS/SVE) wells and the performance of an AS/SVE feasibility test. The details and results from both activities are included in this final RAP. A copy of the CRWQCB letter is included in Appendix A.

2.0 SITE DESCRIPTION

The subject site is an active Mobil service station which sells Mobil-branded gasoline, located at the northwestern corner of North Long Beach Boulevard and Del Amo Boulevard in Long Beach, California (Plate 1). The site facilities consist of a service station building containing a Mobil Mart food store. The fueling system consists of three unleaded-gasoline underground storage tanks (USTs), one diesel UST, seven fuel dispensers (six gasoline and one diesel) and the associated product piping. The site facilities are shown on the Generalized Site Plan (Plate 2). The area surrounding the site consists of commercial businesses, apartments and residential housing. A Chevron service station is located on the southwestern corner of the intersection across Del Amo Boulevard. A Shell service station is located on the southeastern corner. A 7-Eleven food store and a McDonald's restaurant are located on the northeastern corner.

3.0 BACKGROUND

This section briefly summarizes previous activities conducted at the site. For more detailed information, refer to the documents listed in the reference section of this RAP. The locations of soil samplings and existing groundwater monitoring wells are shown on Plate 2. Soil analytical results from previous investigations are summarized in Table 1, and cumulative water level measurements and groundwater analyses are presented in Table 2.

In August 1989, American Environmental Management Corporation (AEM) conducted a site assessment that consisted of drilling and sampling six soil borings, and completing three of the soil borings as groundwater monitoring wells (AEM, 1989). The results of this investigation prompted the City of Long Beach Department of Health and Human Services (LBDHHS) to transfer the case to the CRWQCB for further review and oversight. The case was transferred on October 4, 1989, and the CRWQCB issued case file No. 908050452 to this site. Subsequent to the transfer of this case to the CRWQCB, additional site assessment and remedial testing activities were performed at the site which resulted in the installation of nine groundwater monitoring wells (five on site and four off site), three on-site air sparging wells and two on-site vapor extraction wells. Quarterly groundwater monitoring was conducted at the site from first quarter 1993 through second quarter 1996 (TRAK Environmental Group, 1996). During this time period, depth to groundwater ranged from approximately 27 to 36 feet below ground surface (bgs), and the groundwater flow direction was consistently toward the southwest. On July 23, 1996, the CRWQCB issued an Underground Storage Tank Case Closure Letter, and required that all wells be properly destroyed. On November 11, 1996, Remedial Management Corporation (RMC) submitted a well abandonment report stating that all of the wells (on site and off site) had been abandoned by pressure grouting (RMC, 1996).

In January 2001, H.B. Covey of Pomona, California, conducted a fueling system upgrade at the site. The upgrade consisted of removing and replacing the fuel dispensers and related product piping. FREY Environmental, Inc. (FREY) of Newport Beach, California, performed soil sampling activities in conjunction with the fueling system upgrade. FREY personnel collected soil samples from six locations adjacent to the fuel dispensers and from one location adjacent to the product piping. Methyl tertiary butyl ether (MTBE) in soil was measured at a maximum concentration of 50 milligrams per kilogram. (FREY, 2001)

ExxonMobil transferred environmental consulting responsibilities for this site to ERI in October 2002. In subsequent case reviews between ExxonMobil and ERI, a decision was made to assess the condition of soil and groundwater beneath the site. This decision was based on the concentrations of fuel oxygenates in soil detected during the aforementioned fueling system upgrade, and the juxtaposition of sensitive receptors in the area. In February 2003, ExxonMobil submitted a work plan for the installation of three groundwater monitoring wells at the site.

In April 2003, ERI conducted an initial site assessment which consisted of drilling and sampling soil borings B1 through B3. Borings B1 and B2 were completed as groundwater monitoring wells MW1 and MW2, respectively. Boring B3 was completed as dual-completion groundwater monitoring/soil vapor extraction well MW3. During this investigation, groundwater was first encountered at approximately 30 feet bgs. The data presented in this report resulted in the LBDHHS transferring the case to the CRWQCB for further review and oversight. (ERI, 2003)

In October 2004, ERI conducted an additional site assessment which consisted of drilling and sampling off-site soil borings B4 through B6. The borings were completed as groundwater monitoring wells MW4 through MW6, respectively. The purpose of this investigation was to provide off-site delineation of fuel constituent concentrations in soil and groundwater. (ERI, 2004)

In March 2005, ERI drilled and sampled on-site boring B7 which was completed as groundwater monitoring well MW7. This well was installed to provide upgradient delineation in the northeastern portion of the site. (ERI, April 14, 2005)

3.1 Groundwater Monitoring

Quarterly groundwater monitoring and sampling has been conducted at the site since the second quarter 2003. During that time, the average depth to groundwater at the site has been approximately 29 feet bgs, and groundwater flow direction has been toward the southwest. The most recent quarterly groundwater monitoring and sampling event took place on August 4, 2005 (ERI, October 15, 2005). Groundwater elevation data for the third quarter 2005 is shown on the Groundwater Elevation Contour Map – 08/04/05 (Plate 3).

4.0 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is situated within the West Coast Groundwater Basin in the southwestern portion of the Central Basin Pressure Area subunit of the Los Angeles County Coastal Plain [California Department of Water Resources (CDWR), 1961]. The site is located on the physiographic feature known as the Downey Plain, a broad alluvial plain formed by the ancestral Los Angeles and Rio Hondo-San Gabriel River systems. The Downey Plain extends from Ballona Gap southward across the central lowland area of the coastal plain. The site is located approximately 0.4 miles east of the Los Angeles River and approximately 5.0 miles west of the San Gabriel River. Beneath the site vicinity are approximately 50 feet of Quaternary alluvial sediments that overlie the Pleistocene-age Lakewood Formation. The upper portion of the Lakewood Formation includes the Bellflower Aquiclude, which consists of a mixture of fine-grained flood plain, marine and wind-blown deposits. In the region of the site, the first producible aquifer is the Artesia Aquifer, the uppermost aquifer of the Lakewood Formation, which occurs in the vicinity of the site from an estimated depth of 75 to 105 feet bgs

(CDWR, 1961, Cross-Section E-E'-E"). The subsurface distribution of the Artesia Aquifer follows the general trend of the present-day San Gabriel River-Coyote Creek drainage and is composed of gravel and sand with interbedded silt and clay (CDWR, 1961). A thin aquiclude separates the Artesia Aquifer from the underlying Gage Aquifer. The Gage Aquifer is the lowermost aquifer of the Lakewood Formation, occurring in the site vicinity from an estimated depth of 125 to 155 feet bgs. The Gage Aquifer consists of coarse-grained sand with minor gravel in the region of the site.

Structurally, the site is situated within the Newport-Inglewood Fault Zone, a northwest-southeast trending region of structural deformation. In the site vicinity, the Newport-Inglewood Fault Zone includes the Cherry Hill Fault and Long Beach Anticline, which are located about 1 mile to the southwest of the site (CDWR, 1961).

4.1 Site Stratigraphy

Based on the results of the assessment work performed by ERI, the shallow sediments beneath the site consist chiefly of silt and sandy silt to approximately 25 feet bgs. Below 25 feet, the sediment consists of poorly graded sand to the maximum explored depth of 51.5 feet bgs. Geologic cross-sections A-A' and B-B' are presented as Plates 4 and 5, respectively.

5.0 SENSITIVE RECEPTORS

Sensitive receptors include water supply wells, schools, hospitals and surface water bodies within a 1-mile radius of the site. In August 2005, ERI updated the sensitive receptor survey information for this site. The initial SRS was performed in 2003. Each receptor identified by this survey is depicted on the Sensitive Receptor Map (Plate 6).

5.1 Water Well Inventory

Nine potential receptor wells were identified within a 1-mile radius of the site. The two closest wells, wells 905L and 906B, are located approximately 2,170 feet southwest and 2,270 feet south of the site, respectively. Well 905L is listed as last being measured on November 24, 2004, and at that time groundwater was encountered at a depth of 73.5 feet bgs. Well 906B is listed as last being measured on October 13, 2004, and at that time groundwater was encountered at a depth of 96.5 feet bgs. Well 905L was originally drilled to a depth of 378 feet bgs on July 27, 1955. The well was originally perforated from a depth of 360.5 to 375.5 feet bgs, and its initial use is listed as "Public Playgrounds." The original depth of well 906B was 177 feet bgs, but the well use, perforated intervals, and date drilled were unavailable from the Los Angeles County Department of Public Works – Hydrologic Records Division.

5.2 Schools and Hospitals

Schools and hospitals in the site vicinity were located using the Yahoo! Maps database and Rand McNally's 2003 Thomas Guide. The survey identified five schools located within a 1/2-mile radius of the site. Those five schools are:

- Praise Temple Academy, 5095 North Long Beach Boulevard, Long Beach. This school is located approximately 630 feet north/northwest of the site.
- Sutter Elementary School, 5075 Daisy Avenue, Long Beach. This school is located approximately 1,580 feet west of the site.
- Long Beach Adventist School, 4951 Oregon Avenue, Long Beach. This school is located approximately 2,010 feet west of the site.
- Southwestern Longview School, 4747 Daisy Avenue, Long Beach. This school is located approximately 2,270 feet southwest of the site.
- Addams Elementary School, 5320 Pine Avenue, Long Beach. This school is located approximately 2,320 feet northeast of the site.

There are no hospitals located within a 1-mile radius of the site.

5.3 Surface Water

Based on a review of the United States Geological Survey 7.5-minute topographic map for the Long Beach, California, quadrangle (photorevised 1981), the closest surface water body to the site is the junction of Compton Creek with the Los Angeles River, approximately 0.4 miles west of the site. The Los Angeles River drains southward toward the Pacific Ocean.

6.0 AS/SVE WELL INSTALLATION ACTIVITIES

All field activities were conducted under the direct supervision of a state of California professional geologist and in accordance with ERI's site-specific health and safety plan. The following sections describe the field activities undertaken during the drilling and sampling of soil borings B8 through B11, which were completed as wells AS/SVE1 through AS/SVE4, respectively.

6.1 Preliminary Activities

Prior to the onset of drilling activities at the site, ERI obtained a well construction permit from the LBDHHS. A copy of the well construction permit is included in Appendix B. The LBDHHS and the CRWQCB were notified at least one week prior to the start of work. ERI contacted Underground Services Alert at least 48 hours prior to the start of work to mark buried utilities.

On May 27, 2005, ERI directed GEOVision Inc. of Corona, California, to conduct a geophysical survey of the proposed boring locations. GEOVision marked one proposed on-site boring location, B11, as potentially located between two unknown trenches. No additional underground utilities were discovered in close proximity to the proposed on-site boring locations.

On May 27, 2005, the borehole locations were cleared with non-destructive air excavation tools to a depth of 5 to 8 feet bgs by Milestone Exploration of Anaheim, California, in accordance with ExxonMobil's procedures for utility clearance of boreholes.

6.2 Well Installation Activities

From May 31 to June 2, 2005, an ERI field geologist directed the drilling of borings B8 through B11, each to a total depth of approximately 44 feet bgs. The borings were subsequently completed as remediation wells AS/SVE1 through AS/SVE4. ERI's subcontractor, J&H Drilling Company, Inc. of Anaheim, California, performed the drilling and well installations using a CME-81 drilling rig equipped with 8-inch and 10-inch diameter, continuous flight, hollow-stem augers. Triple-completion wells AS/SVE1 through AS/SVE4 were constructed by installing an air sparging well and two SVE wells in the same borehole. The air sparging wells were set at total depths of 44 feet bgs. The wells were installed by setting a 3-foot long by 1.25-inch diameter, #60 stainless steel mesh, well injection point at the total depth of the wells and then coupling it to 1-inch diameter, schedule 40, polyvinyl chloride (PVC) casing. The SVE portions of each AS/SVE well were completed at discrete depths. The shallow SVE casing of each well was set at a total depth of 17 feet bgs, and was constructed with 2-inch diameter, schedule 40 PVC. The deep SVE casing of each well was set at a total depth of 31 feet bgs, and was also constructed with 2-inch diameter, schedule 40 PVC. The screened intervals of both the shallow and the deep SVE wells are 10 feet in length and are constructed with sections of factory slotted, 0.020-inch screened casings. Above the screened intervals, blank 2-inch diameter casings were set to approximately 0.5 feet bgs. The annular spaces of the AS/SVE wells are backfilled with hydrated bentonite. The wells were surface completed with traffic-rated well vaults. The well construction details are included on the soil boring logs in Appendix C.

6.3 Soil Sampling

The ERI geologist directed the collection of soil samples for chemical analysis at approximate 5-foot intervals to the total depth of each boring. J&H used an 18-inch long, 2-inch diameter California modified split-spoon sampler lined with three 6-inch long stainless steel sample sleeves. The soil samples from borings B8 through B11 were classified and described by the ERI geologist at the time of their collection according to the Unified Soil Classification System. The soil sample descriptions and photo-ionization detector (PID) readings for each sample are presented on the boring logs in Appendix C.

Soil samples selected to be submitted for laboratory analysis were preserved in the field in accordance with Environmental Protection Agency (EPA) Method 5035, entered onto a chain-of-custody record and placed in chilled storage for later transport to an ExxonMobil-approved, state-certified analytical laboratory.

6.4 Soil and Water Disposal

Soil generated during borehole clearance and drilling activities was temporarily stored on site in Department of Transportation (DOT)-approved, sealed 55-gallon drums and subsequently transported to TPS Technologies' permitted soil-recycling facility in Adelanto, California. The equipment decontamination water generated during the drilling activities and purge water generated during well development was stored on site in DOT-approved, sealed, 55-gallon drums and later transported to Crosby and Overton's permitted groundwater recycling facility in Long Beach, California. Copies of the non-hazardous waste manifests for soil and groundwater recycling are included in Appendix D.

7.0 AS/SVE FEASIBILITY STUDY

On July 6 and 7, 2005, ERI conducted an AS/SVE feasibility study in accordance with the work plan prepared by ERI dated March 4, 2005. The objectives of the AS/SVE study were to obtain engineering data for evaluation of future remediation options at the site; and to accomplish mass removal of fuel constituents by removing soil vapors from one or more wells located in the areas where the highest concentrations of fuel constituents were previously detected.

In situ AS/SVE causes fuel constituents to volatilize from groundwater to vapor phase where they can be transported to and recovered from the vadose zone. This technology is applicable at sites where permeable soils extend from the saturated zone (to facilitate air injection into groundwater) into the vadose zone (to facilitate capture of the off-gas generated from sparging). In situ AS/SVE requires simultaneous operation of an air injection source (i.e., a blower or compressor) and a vapor extraction system. Air sparging involves the injection of air into the saturated zone below the areas containing fuel constituents. Fuel constituents dissolved in groundwater and adsorbed on soil particles are stripped by the introduced air and become vapor phase fuel constituents. The vapor phase fuel constituents migrate upward to the vadose zone where they are captured by vapor extraction methods. The removal rates of benzene, toluene, ethylbenzene and total xylenes (BTEX) are greater using air sparging than pump and treat technology. Air sparging does not significantly change the pressure head in the ground and therefore should not change the groundwater flow direction.

Based on the field and laboratory data generated during the previous site assessment activities performed at the site, ERI used a mobile thermal-oxidizing vapor extraction unit and an air compressor to

conduct the test. The study was performed in three phases: Phase 1 consisted of two single well tests to determine the effective radius of influence (ROI) for vapor extraction for both the shallow (fine-grained) zone and the deep (coarse-grained) zone; Phase 2 determined the induced pressure ROI from air sparging; and Phase 3 measured the amount of fuel constituents removed during the simultaneous operation of air sparging on the SVE wells.

7.1 Field Procedures

ERI subcontracted Ecotech Environmental Corporation of Fountain Valley, California, to provide a 250-standard cubic feet per minute (scfm), thermal oxidizing mobile vapor extraction/treatment unit and a Sullair 185® portable air compressor for the AS/SVE study. The mobile unit is capable of simultaneously applying air pressure to the air sparging wells while applying a vacuum to draw soil vapors from the SVE wells and surrounding subsurface soils. The thermal oxidizer on the mobile unit was used to treat the extracted vapors. An oil-less compressor was used for air sparging to provide injection air.

Throughout the three phases of the AS/SVE study, ERI personnel monitored the extraction well(s) and recorded on a periodic basis the total flow rate of the influent vapor stream to the thermal oxidizer in scfm and the vacuum produced by the blower at the unit in inches of water (in. H₂O). During the test, the influent vapor stream was monitored by using a MiniRAE® PID calibrated to an isobutylene standard of 100 parts per million by volume (ppmv). Field instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure fuel hydrocarbon concentrations with the same precision as laboratory analysis.

The induced negative or positive pressure readings in the observation wells were recorded at periodic intervals during the phases of the study designed to determine the ROI. A Dwyer digital manometer was used to measure and record the induced negative/positive pressure created in each of the observation wells in in. H₂O.

Prior to the start of the tests, aboveground, 2-inch diameter, reinforced flex hoses with inline shut-off valves were routed from the vapor treatment unit and connected to the casing heads of the extraction well(s). Temporary traffic ramps were installed to protect the hoses connected to the extraction wells used during the single- and multiple-well tests. The following sections describe the tests in the order they were performed.

7.2 Phase 1 – Single-Well SVE ROI Tests

Vacuum extraction for the single well SVE tests was conducted on the vapor extraction portion of triple-completion well AS/SVE1 for the deep and shallow zones. The deep zone was tested first and consisted of applying an average vacuum of approximately 105 in. H₂O to well SVE1-deep and measuring induced vacuums in observation wells AS/SVE2 through AS/SVE4, and in groundwater monitoring well MW6. All

vacuum readings from the extraction well were measured during the test before the vacuum receiver. The deep zone ROI test was conducted for approximately 180 minutes. Influent vapor samples I-SVE1D-A and I-SVE1D-B were collected during the deep zone test.

The shallow ROI zone test was also conducted for approximately 180 minutes. The average vacuum applied at the shallow zone was approximately 120 in. H₂O. The same observation wells that were used to measure induced vacuum during the deep zone single well ROI test were also used for the shallow zone test. Influent vapor samples I-SVE1S-A and I-SVE1S-B were collected during the shallow zone test. The laboratory analytical data from the influent vapor samples is presented in Table 3. The field readings measured during the shallow and deep SVE ROI tests are presented in Tables 4 through 7.

7.3 Phase 2 – Single-Well Air Sparging ROI Test

A single-well air sparging test was performed to determine the positive pressure ROI. The test was performed by connecting the air sparging portion of well AS/SVE1 to an oil-less air compressor capable of providing air pressure sufficient to overcome the hydraulic head above the well's injection point and the entry pressure required to allow the injected air to move away from the well bore and into the fine-grained soils of the saturated zone. The test was performed using an average air injection pressure of 7.5 pounds per square inch (psi). The injection well data recorded during the air sparging ROI test is presented in Table 8.

The positive pressures induced in the vadose zone were monitored periodically at observation wells AS/SVE2 through AS/SVE4, MW1, MW2 and MW6. The depth to groundwater was measured at the beginning and end of the single-well air sparging test from all six observation wells. In addition, dissolved oxygen (DO) readings were collected periodically from wells MW1, MW2 and MW6 during the test. Induced pressure readings are presented in Table 9. Groundwater level measurements and DO readings are presented in Table 10.

7.4 Phase 3 – Multiple Well AS/SVE Mass Removal Test

The multiple well AS/SVE mass removal test was conducted by connecting the mobile thermal-oxidizing vapor extraction unit to the SVE casings of wells AS/SVE1 through AS/SVE4 and conducting simultaneous vapor extraction on all the wells while supplying compressed air to the air sparging tip in well AS/SVE1. This test was conducted to evaluate the maximum vapor concentrations detected by laboratory analyses while performing full-scale extraction from the remediation wells on site. The vapors extracted during the test were monitored with a PID at the influent to the treatment unit. Composite influent vapor samples I-SVE COMB-A and I-SVE COMB-B were collected for laboratory analyses near the beginning of the test and before ending the test, respectively. Field readings measured during the

mass removal test are presented in Table 11. The laboratory analytical data from the influent vapor samples is presented in Table 3.

8.0 ROI RESULTS

The following sections discuss the ROI results of the AS/SVE test.

8.1 Effective Vapor Extraction ROI

The effective ROI for vapor extraction was determined from a graphical solution. The induced vacuum measured in each of the observation wells at the end of the single-well SVE tests, and the applied vacuum measured at the extraction well, was plotted on a semi-logarithmic graph as a function of the distance between each observation well and the extraction well. A computer-derived best fit line was drawn through the data points and used to determine the vapor extraction ROI. The graphical solutions for the deep zone and the shallow zone ROIs are presented on Plate 8 and Plate 9, respectively.

The induced vacuum readings measured at the observation wells during the single-well deep zone ROI test indicate that an estimated effective vapor extraction ROI of approximately 44 feet was obtained using well AS/SVE1 as the extraction well at an average applied vacuum of 105 in. H₂O and a total flow rate of 11 scfm. The effective vapor extraction ROI for the shallow zone of approximately 34 feet was obtained using well AS/SVE1 as the extraction well at an applied vacuum of 120 in. H₂O and a total flow rate of 13 scfm. The ROIs for both the deep and the shallow zones are based on an induced vacuum of 0.25 in. H₂O as the minimum vacuum required for effective and cost-efficient vapor extraction. Induced vacuums were still rising at the end of the test, so the estimated ROI for both zones is considered to be conservative.

8.2 Effective Air Sparging ROI

A maximum air pressure of 8.5 psi was applied to the air sparging portion of triple-completion well AS/SVE1 during the single-well air sparging test. Positive pressure readings measured in the vapor monitoring points indicated that an ROI of approximately 42 feet could be generated from well AS/SVE1 during air sparging. The representative ROI graph of the positive pressure measurements, at an effective positive pressure reading of 1.0 in. H₂O, is presented on Plate 10.

9.0 LABORATORY ANALYSES

The soil samples were submitted for chemical analysis to TestAmerica, Inc. (TestAmerica) in Nashville, Tennessee. TestAmerica is certified as an analytical laboratory by the State of California Department of Health Services. ERI personnel collected vapor samples in Tedlar® bags from the influent vapor stream

to the thermal oxidizer treatment unit at the beginning and end of each phase of the test. The vapor samples were submitted for analyses to Calscience Environmental Laboratories, Inc. (Calscience) of Garden Grove, California, a state-certified laboratory.

The soil and vapor samples were analyzed for the presence of total petroleum hydrocarbons as gasoline (TPHg) by EPA Cal-LUFT Method and EPA Method T0-3(M), respectively, and for BTEX and fuel oxygenates by EPA Method 8260B and EPA Method TO-15M, respectively. The fuel oxygenates analyzed were MTBE, di-isopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether and tertiary butyl alcohol. Soil samples were also analyzed for ethanol by EPA Method 8260B and for total petroleum hydrocarbons as diesel by EPA Method 8015B/Cal-LUFT.

The soil analytical results are summarized in Table 1 and depicted on the Soil Sample Analyses Map – 05/31-06/02/05 (Plate 7). The vapor analytical results are summarized in Table 3. The laboratory reports and chain-of-custody records for the soil and vapor samples are included in Appendix E.

10.0 EVALUATION OF AS/SVE TEST RESULTS

Based on the engineering data obtained and the vapor analytical results from this feasibility study, ERI makes the following evaluations regarding the effectiveness of the AS/SVE system proposed for this site:

- The calculations of total pounds of TPHg, benzene and MTBE removed in the vapor stream are summarized in Table 12. The calculations used to determine the amounts of fuel constituents removed in the vapor stream are based on the system flow rate, operating hours and the analytical results of the influent vapor samples submitted to Calscience. The total pounds of TPHg, benzene and MTBE removed from the vadose zone were 28.087 pounds, 0.0363 pounds and 0.306 pounds, respectively.
- The relatively limited extent of the ROI for vapor extraction obtained by the vacuum applied during the single-well deep and shallow SVE tests indicates that a high vacuum liquid ring pump (LRP) may be necessary for SVE to be most effective. The LRP should be capable of providing a vacuum of at least 18 inches of mercury and a flow rate of at least 50 scfm. A conservative representation of the effective ROI for both air sparging and SVE using the engineering data obtained during this feasibility study is presented on the Soil Vapor Extraction & Air Sparging Radius of Influence Map (Plate 11).
- During the study, a maximum influent vapor sample concentration of 17,000 ppmv of TPHg was reported during laboratory analyses. This concentration is too high for cost-effective vapor treatment with vapor-phase carbon. Therefore, ERI recommends that the initial off-gas be treated

with an electric catalytic oxidizer. ERI also recommends that as these influent vapor concentrations decrease, the catalytic oxidizer be replaced with vapor-phase activated carbon canisters for off-gas treatment. The LRP and off-gas vapor treatment unit (first electric catalytic oxidizer, then carbon) will be interlocked so that they run in series.

- An effective SVE ROI of approximately 44 feet for the deep zone was generated during the single-well SVE test at a flow rate of 11 scfm and an applied vacuum of 105 in. H₂O. An effective SVE ROI of approximately 34 feet for the shallow zone was generated during the single-well SVE test at a flow rate of 13 scfm and an applied vacuum of 120 in. H₂O. An effective air sparging ROI of approximately 42 feet was generated during air sparging at a pressure of 8.5 psi. Based on the fact that the air compressor proposed to be used for the AS/SVE system will be capable of delivering between 6 and 10 scfm and the proposed vapor extraction unit will be capable of generating a flow of at least 50 scfm, all hydrocarbon vapors generated by air sparging will be recovered by the vapor extraction unit. Based on these radii of influence, ERI recommends that two additional AS/SVE wells be installed at the locations shown on Plate 11. The construction of the wells will be similar to that of existing well AS/SVE1.
- Based on the soil vapor analytical data obtained during this test and the historical groundwater analytical data for the site, the predominant constituents of concern appear to be TPHg and BTEX. Fuel oxygenates were detected in soil vapor, but at a smaller percentage. The combination of air sparging and SVE has proven in the past to be an effective tool for remediation of fuel constituents in soil and groundwater.

11.0 RECOMMENDATIONS

Based on historical soil and groundwater analytical data, site geology, and the results of the AS/SVE feasibility study, ERI recommends AS/SVE technology as the most cost-effective and technically feasible technology for soil and groundwater remediation at the site. AS/SVE technology will remediate fuel constituents in the groundwater in the following ways: 1) finely divided air bubbles from the air sparging points, each installed to a depth of approximately 43 feet bgs (13 feet below groundwater), will desorb fuel constituents from the groundwater and bring them upward into the vadose zone where the SVE system removes them; and 2) the introduction of fresh air increases the level of dissolved oxygen in the groundwater, thereby increasing the level of biological activity of naturally occurring microbes. The fuel constituents are broken down by the microbes into carbon dioxide and water. The effectiveness of air sparging in removing fuel constituents from the groundwater beneath the site will be evaluated by continuing to sample the groundwater monitoring wells at the site on a quarterly basis.

Upon approval of this RAP by the CRWQCB, ERI will submit a remedial design package to the City of Long Beach. After remediation system startup, results of the progress of the remediation system will be reported to the CRWQCB in the quarterly site conceptual model updates.

12.0 LIMITATIONS

For any reports cited that were not generated by ERI, the data taken from those reports is used "as is" and is assumed to be accurate. ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these reports.

This report was prepared in accordance with generally accepted standards of environmental, geological and engineering practices in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

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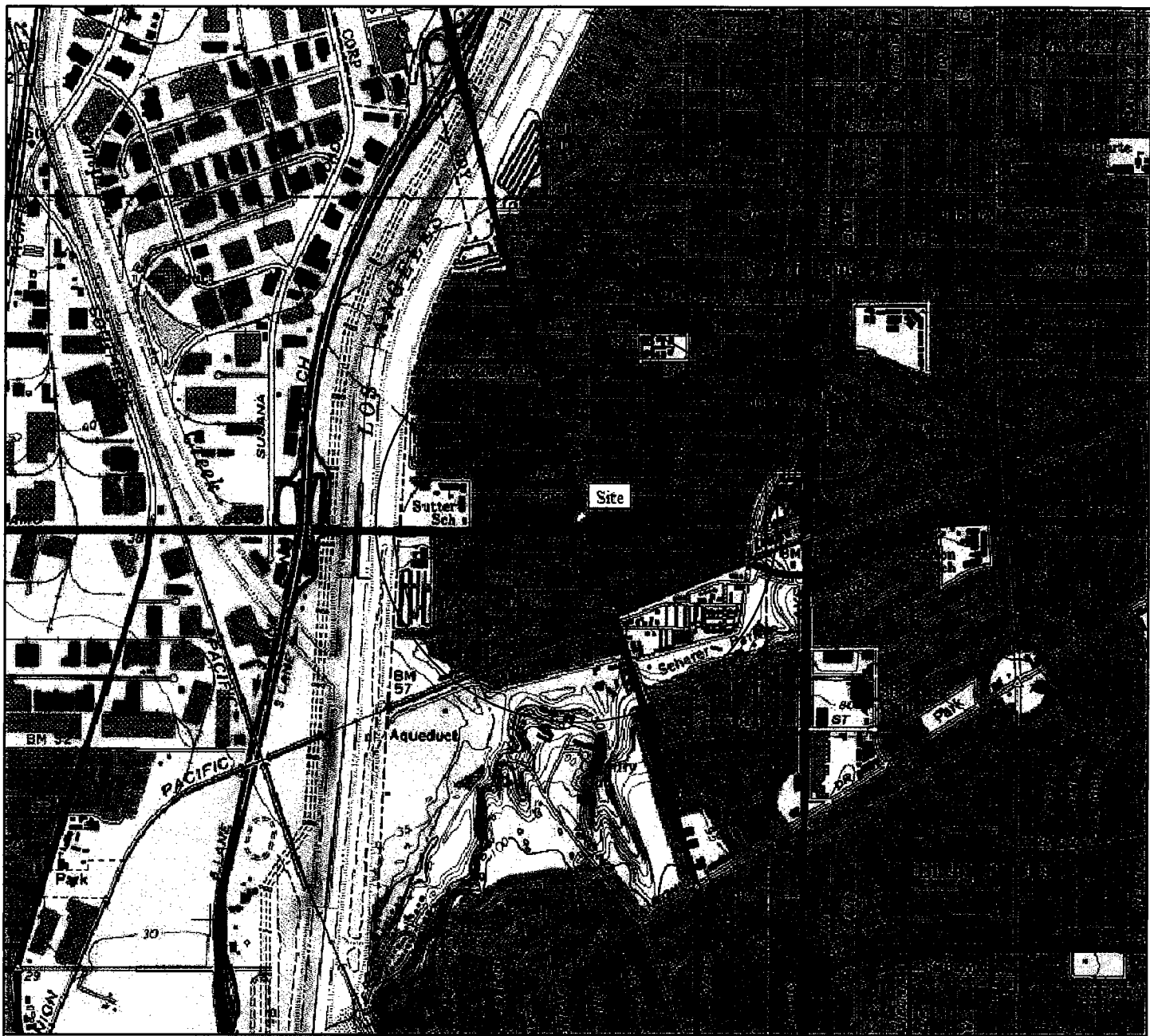
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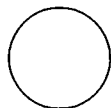
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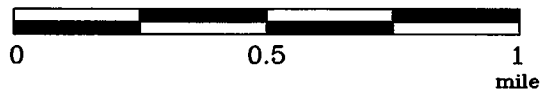
EXPLANATION



1/2-mile radius circle



APPROXIMATE SCALE



SOURCE:
Modified from a map
provided by
National Geographic's TOPO!



SITE LOCATION MAP

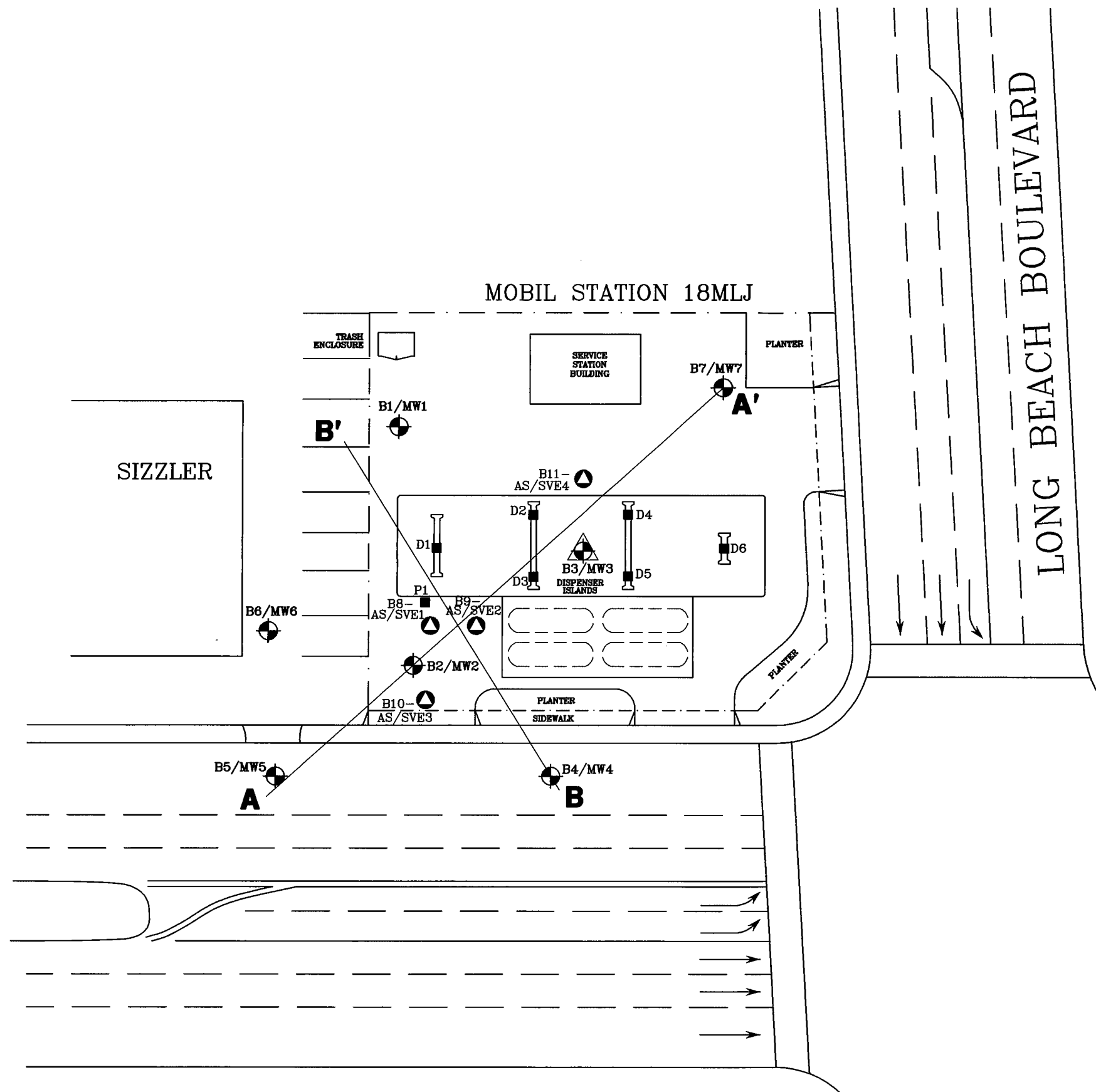
MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

PROJECT NO.

3163

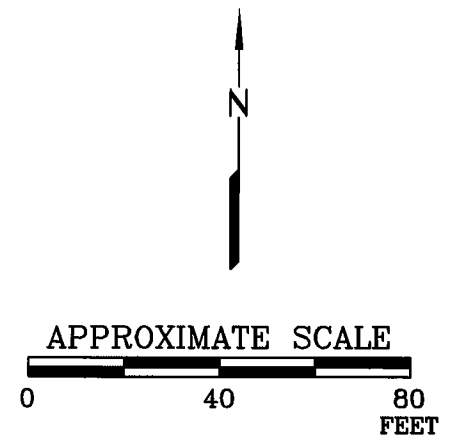
PLATE

1



EXPLANATION

- B7/MW7 Groundwater monitoring well
- B3/MW3 Groundwater monitoring/vadose zone well
- B11-AS/SVE4 Air sparge/soil vapor extraction well
- D6 Soil sample location (FREY Environmental, 1991)
- B—B' Line of cross-section
- Underground storage tank



GENERALIZED SITE PLAN

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

FN 31630004



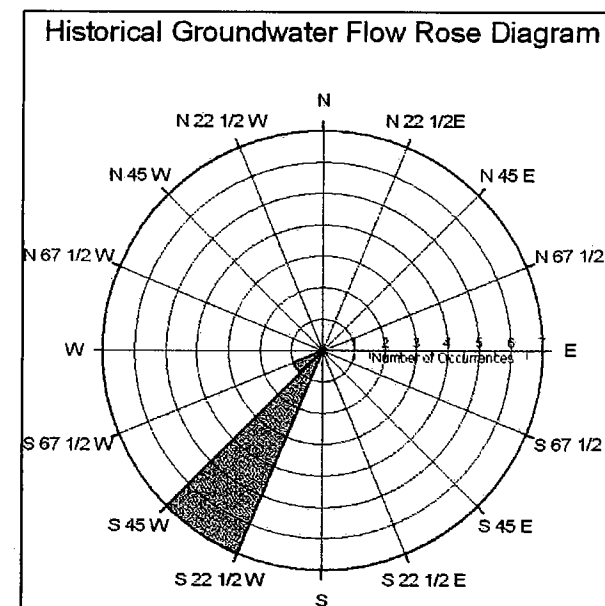
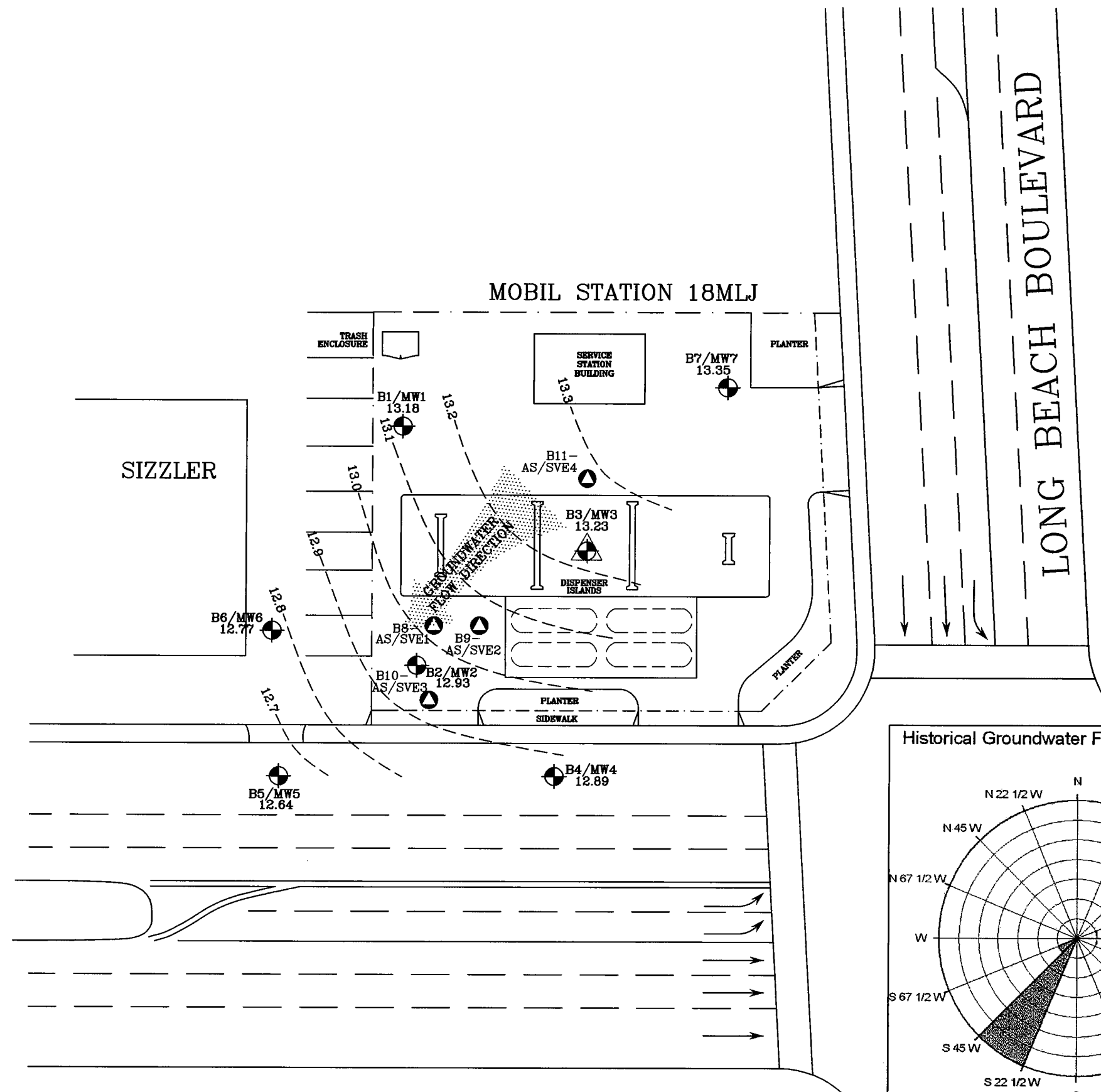
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PLATE

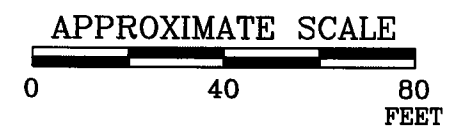
2

DATE: 09/06/05



EXPLANATION

- B7/MW7 Groundwater monitoring well
- B3/MW3 Groundwater monitoring/vadose zone well
- B11-AS/SVE4 Air sparge/soil vapor extraction well
- 13.35 Groundwater elevation (feet, relative to mean sea level)
- Line of equal groundwater elevation
- Underground storage tank



GROUNDWATER ELEVATION CONTOUR MAP 08/04/05

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

FN 31630004



PROJECT NO.

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PLATE

3

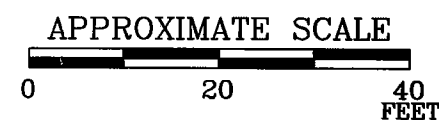
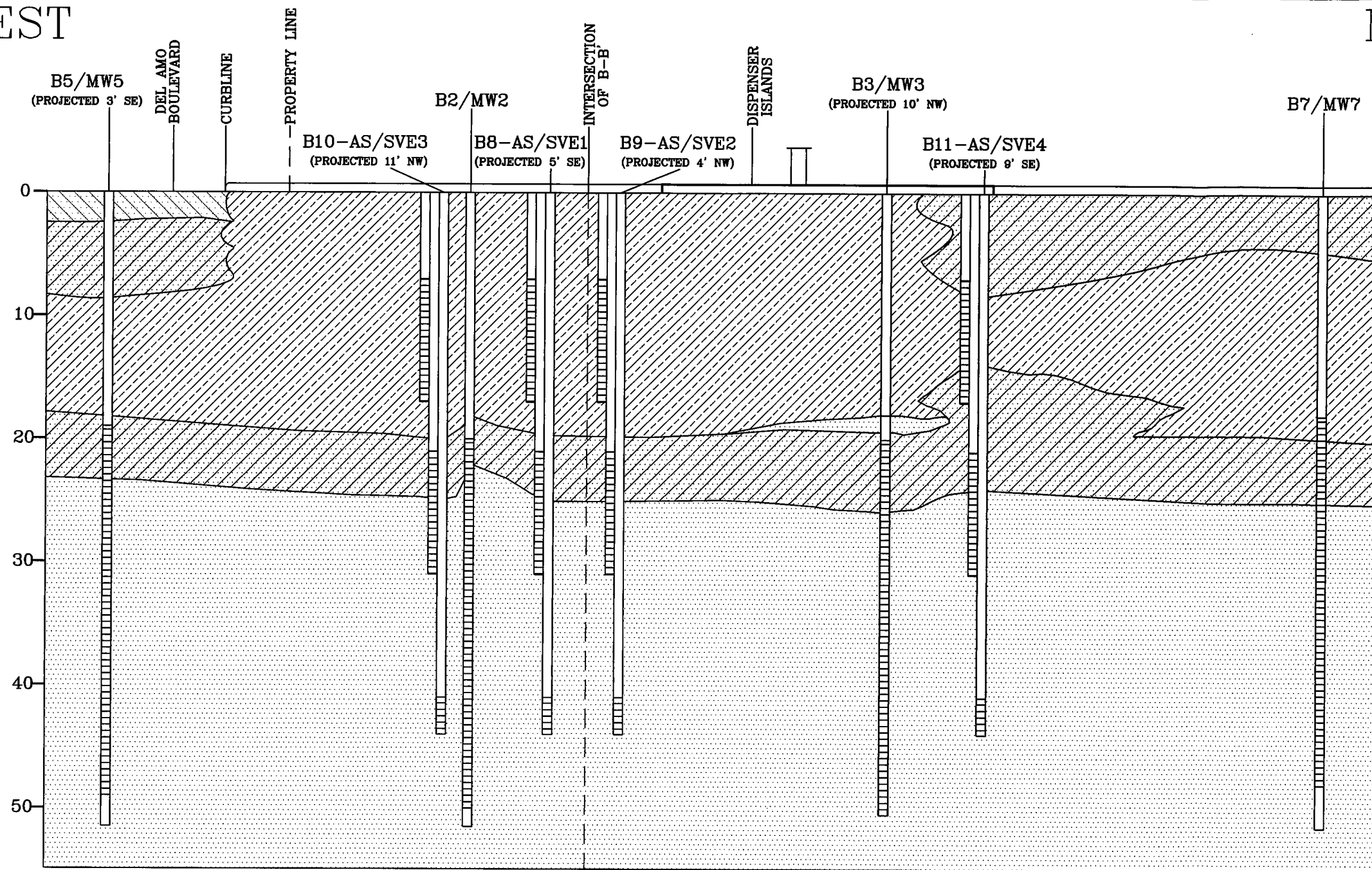
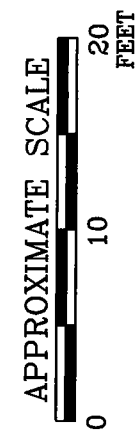
DATE: 10/04/05

SOUTHWEST

A

NORTHEAST

A'



2:1 VERTICAL EXAGGERATION

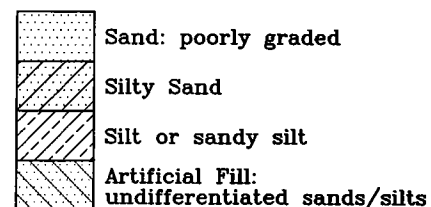
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GEOLOGIC CROSS-SECTION A-A'

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

EXPLANATION



Static water level measured
on 06/02/05

PROJECT

3163

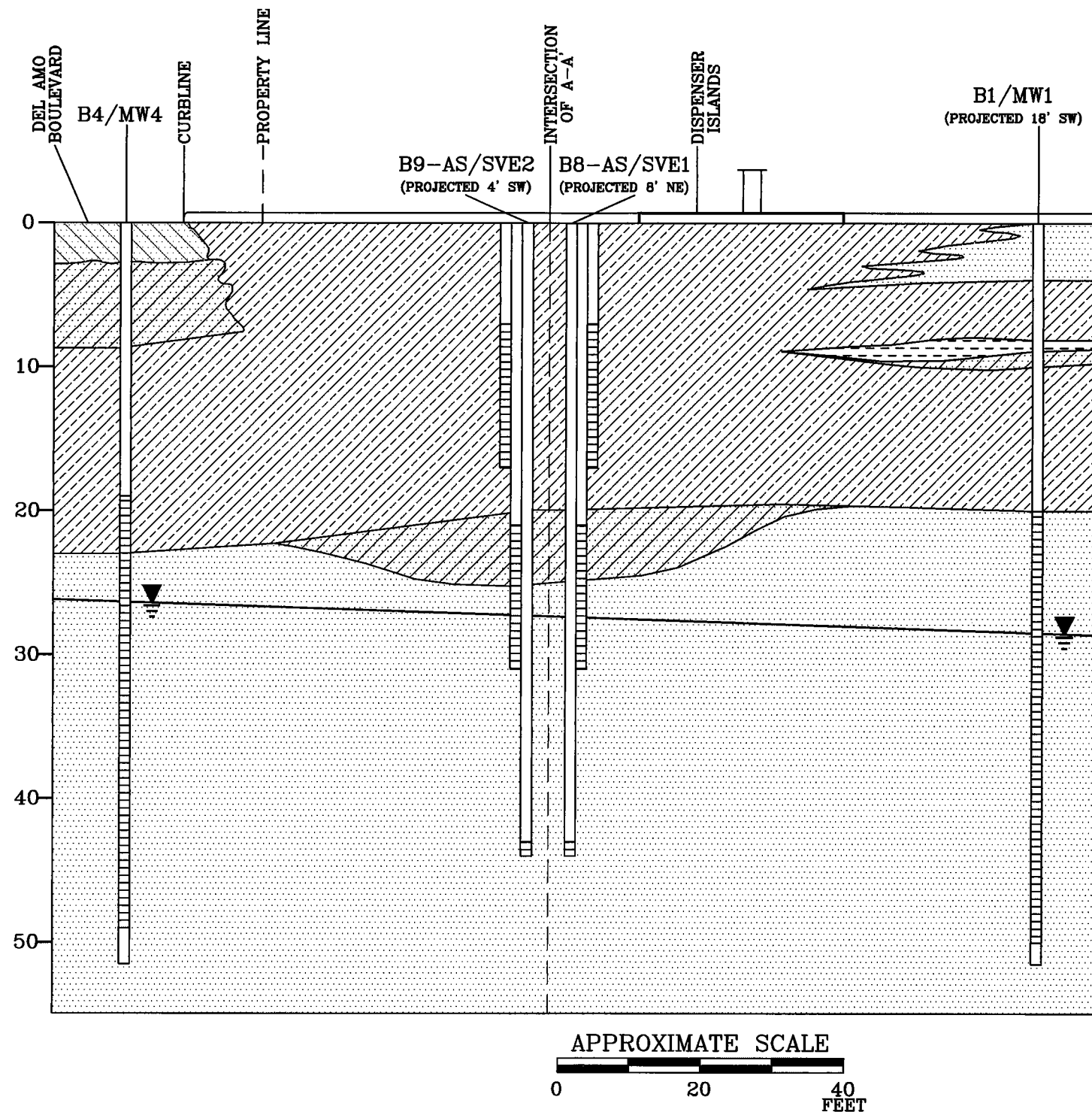
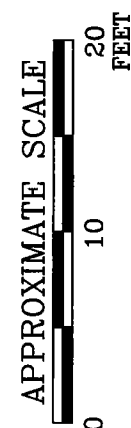
PLATE

4

DATE: 09/01/05

SOUTHEAST
B

NORTHWEST
B'



2:1 VERTICAL EXAGGERATION

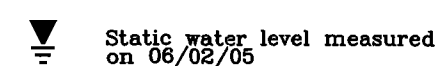
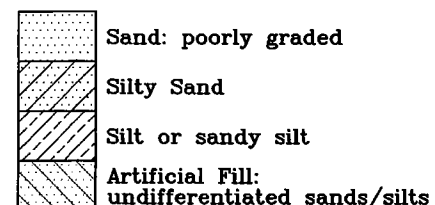
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GEOLOGIC CROSS-SECTION B-B'

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

EXPLANATION



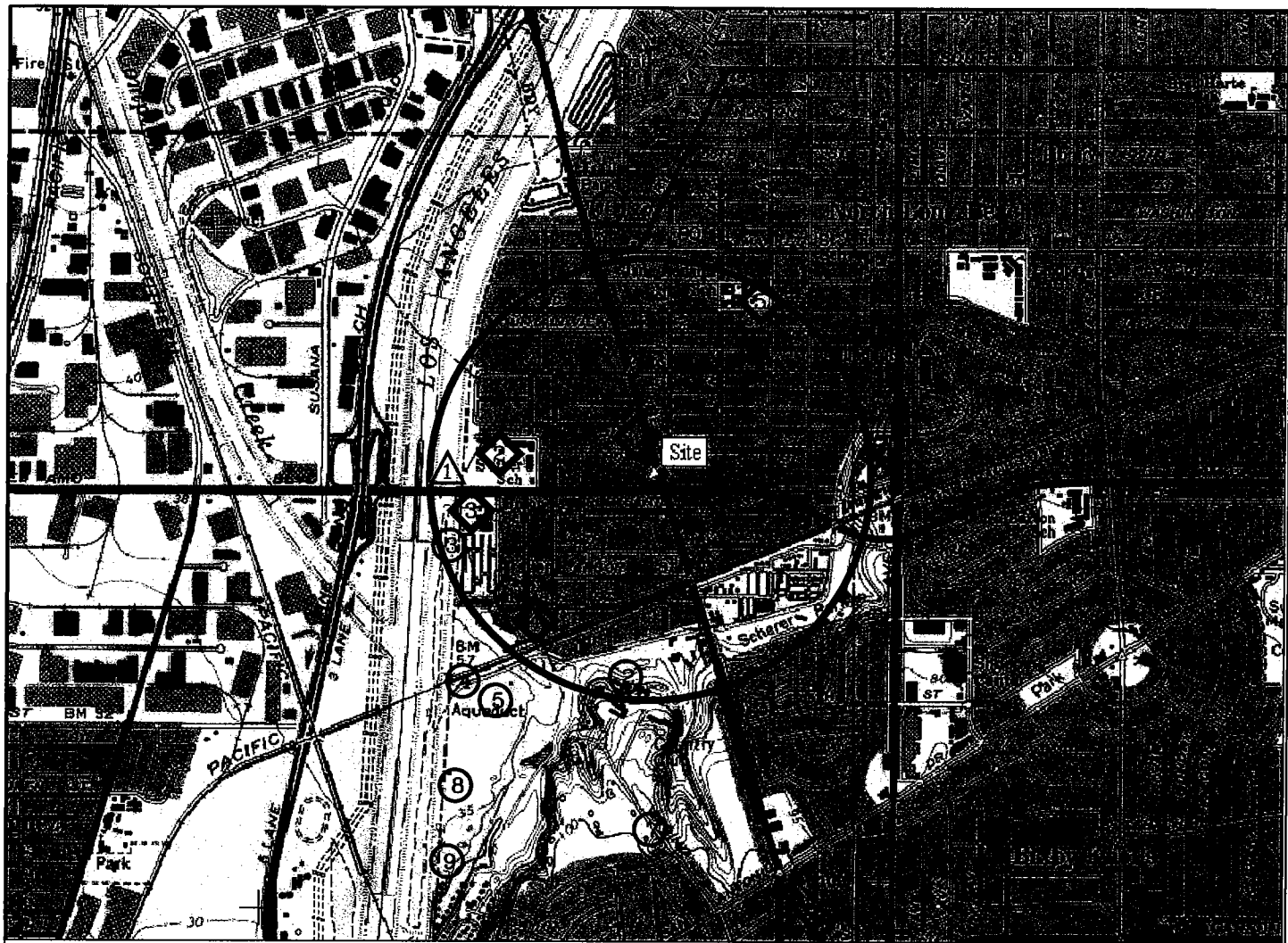
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3163

PLATE

5

DATE: 09/01/05



TN * MN
134°

0 5 MILE
0 1000 FEET 0 500 1000 METERS

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SENSITIVE RECEPTORS

WATER WELLS

- ① 905L (2170 feet)*
- ② 906B (2270 feet)*
- ③ 895J (2400 feet)*
- ④ 906A (2800 feet)*
- ⑤ 906E (2850 feet)*
- ⑥ 904 (3200 feet)*
- ⑦ 906D (3910 feet)*
- ⑧ 896X (4200 feet)*
- ⑨ 896E (4860 feet)*

SCHOOLS

- ① Praise Temple Academy (630 feet)
- ② Sutter Elementary School (1580 feet)
- ③ Long Beach Adventist School (2010 feet)
- ④ Southwestern Longview School (2270 feet)
- ⑤ Addams Elementary School (2320 feet)

HOSPITALS

None

SURFACE WATER

- △ Los Angeles River (2400 feet)

EXPLANATION

○ 1/2-mile radius circle

* = Location obtained from www.ladpw.org

School locations obtained from Microsoft Streets and Trips 2003 database.

NOTES

Only schools within 1/2-mile radius of site are shown

Map Name: Long Beach, CA
Version: 1981



SENSITIVE RECEPTOR MAP

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

PROJECT NO.

3163

PLATE

6

DATE: 09/06/05




B9-AS/SVE2				
Benzene	TPHg	MTBE	TBA	Depth
8.6	<1000	799	<46.5	5'
3.0	6380	9400	1150	10'
91.8	180000	12800	<41.0	15'
831	539000	31700	11400	20'
34.3	1800000	6850	625	25'
<1.6J	316000	11.5	<41.7	30'
7.3	9570	1050	363	35'
<86.2	1060000	64.7J	<2160	40'

B8-AS/SVE1				
Benzene	TPHg	MTBE	TBA	Depth
3.5	360J	885	1070	5'
7.3	11100	1.1J	8540	10'
1.3J	700J	2.0	7900	15'
1.1J	1890	15.8	3140	20'
16.0	400J	224	545	25'
1.4J	1210	7.2	<43.7	30'
<1.6	<1000	<1.6	<40.8	35'
0.7J	12900	<1.8	<46.0	40'

B11-AS/SVE4				
Benzene	TPHg	MTBE	TBA	Depth
7.3	<1000	666	51.6	10'
<1.7	<1000	168	<42.1	15'
<1.5	<1000	27.4	<38.3	20'
<1.8	<1000	15.4	<43.9	25'
<1.7	<1000	<1.7	<43.4	30'
<2.0	<1000	<2.0	<49.2	35'
<2.0	<1000	<2.0	<49.3	40'

B10-AS/SVE3				
Benzene	TPHg	MTBE	TBA	Depth
5.9	<100	33.2	43.7J	5'
3.5	100	32.5	152	10'
1.8J	400	552	716	15'
1.8	<100	253	58.4	20'
6.1	<100	194	<69.4	25'
0.8J	<100	20.7	21.2J	30'
1.2J	<100	8.9	<43.0	35'
1.3J	110	29.6	<46.5	40'

EXPLANATION

-  B7/MW7 Groundwater monitoring well
-  B3/MW3 Groundwater monitoring/vadose zone well
-  B11-AS/SVE4 Air sparge/soil vapor extraction well

 Underground storage tank

TPHg Total petroleum hydrocarbons as gasoline

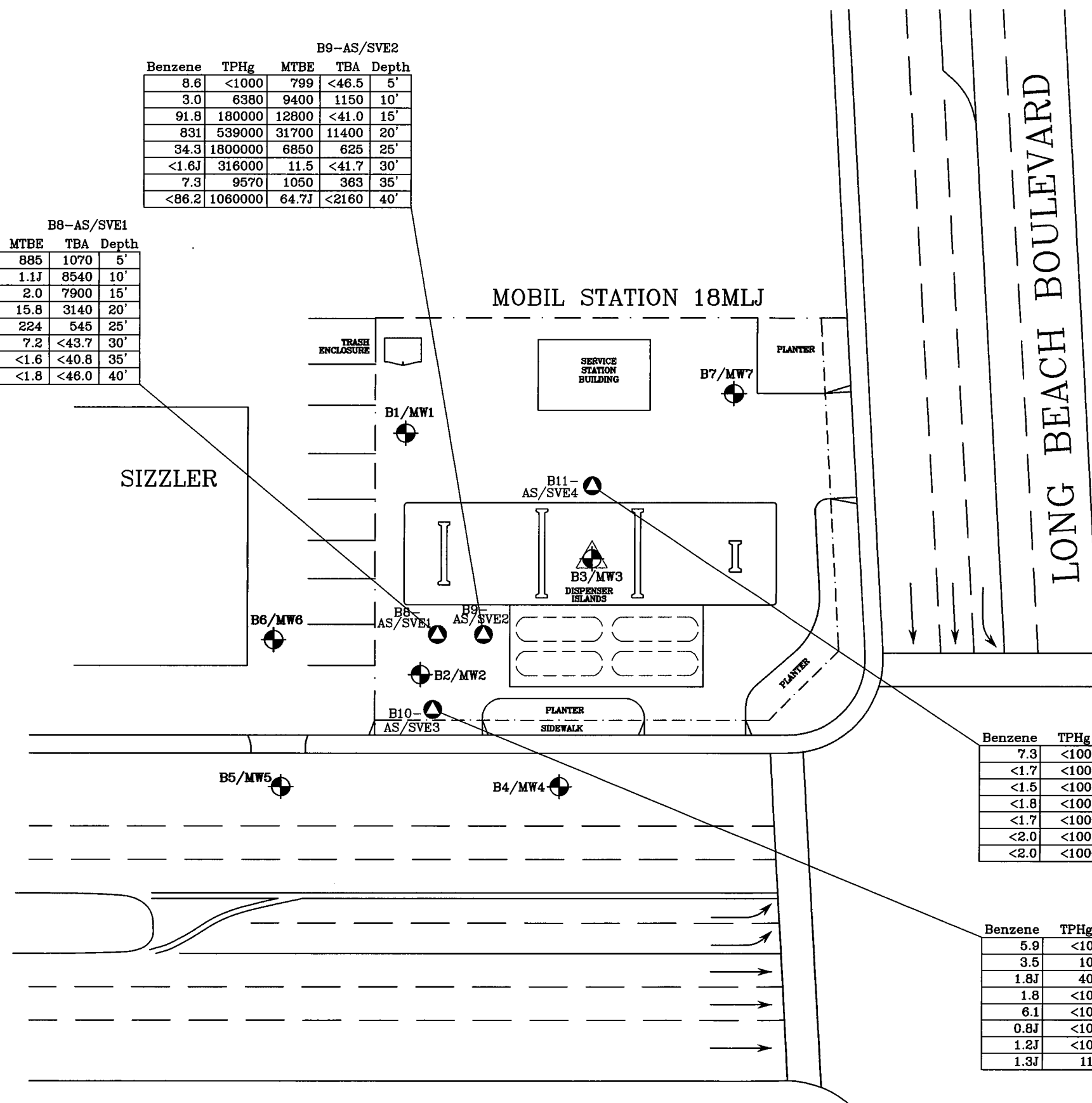
MTBE Methyl tertiary butyl ether

<1000 Less than the stated laboratory reporting limit

J Estimated value between method detection limit and practical quantitation limit

All sample results are listed in milligrams per kilogram

Depth measured in feet below ground surface



SOIL SAMPLE ANALYSES MAP 05/31/05-06/02/05

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

FN 31630004



PROJECT NO.

3163

PLATE

7

DATE: 09/06/05

PLATE 8
VAPOR EXTRACTION RADIUS OF INFLUENCE - WELL AS/SVE1 DEEP ZONE
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
DOWNEY, CALIFORNIA
ERI 3163

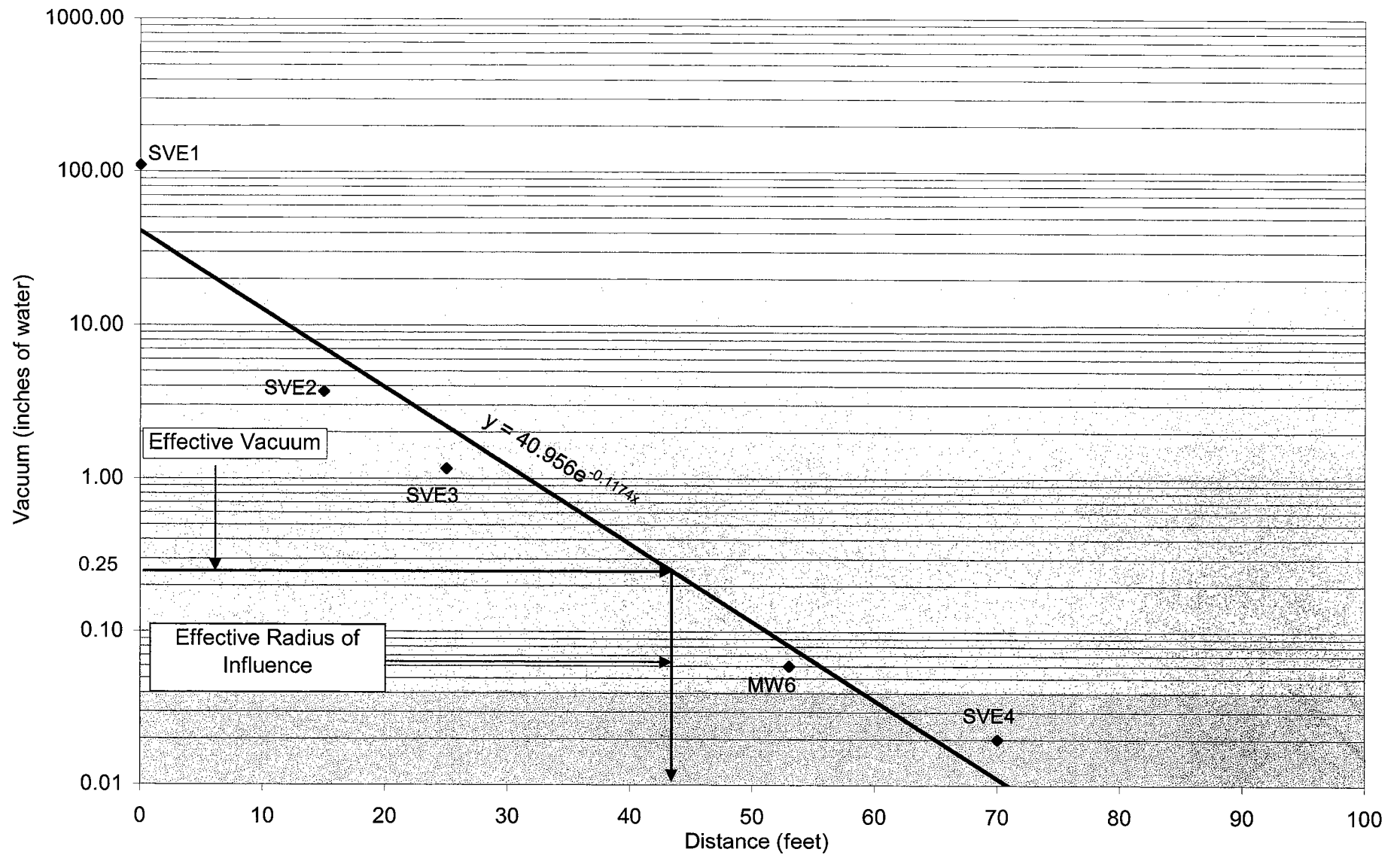


PLATE 9
VAPOR EXTRACTION RADIUS OF INFLUENCE - WELL AS/SVE1 SHALLOW ZONE
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
DOWNEY, CALIFORNIA
ERI 3163

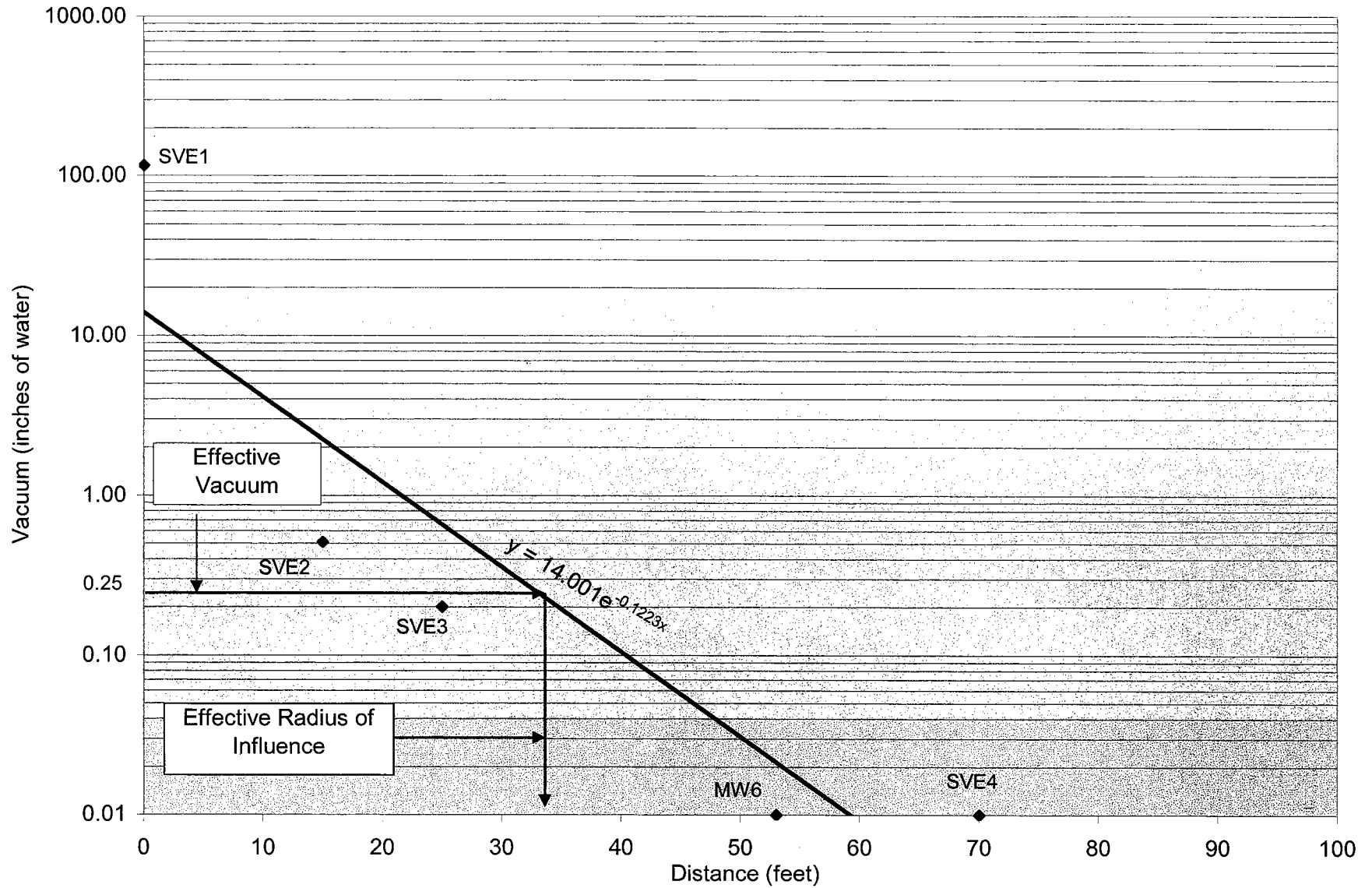
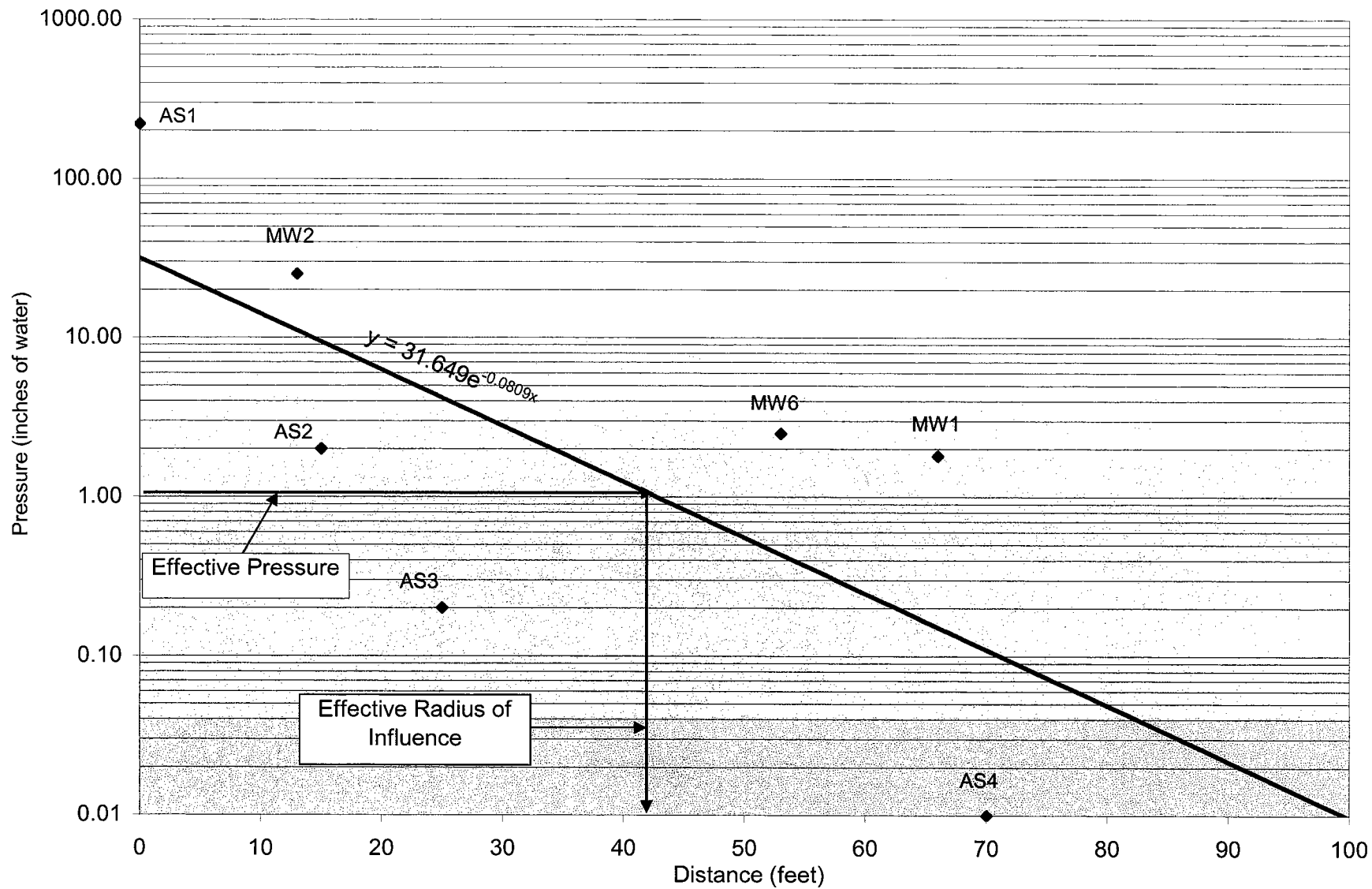
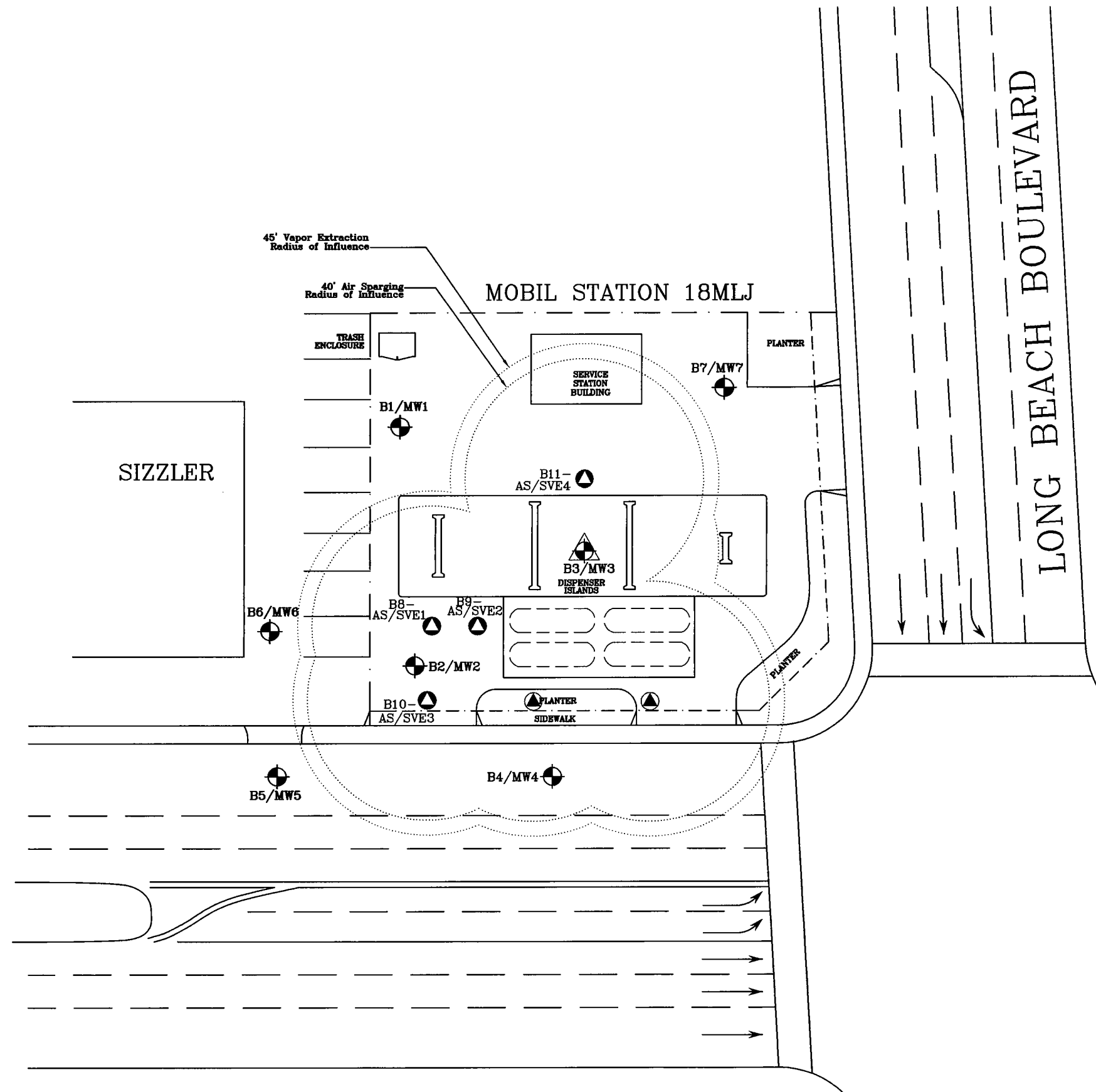


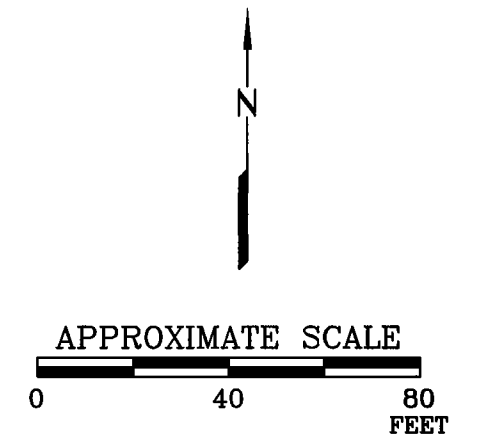
PLATE 10
AIR SPARGING RADIUS OF INFLUENCE - WELL AS/SVE1
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
DOWNEY, CALIFORNIA
ERI 3163





EXPLANATION

- B7/MW7 Groundwater monitoring well
- B3/MW3 Groundwater monitoring/vadose zone well
- B11-AS/SVE4 Air sparge/soil vapor extraction well
- Proposed remediation well
- Underground storage tank



SOIL VAPOR EXTRACTION & AIR SPARGING RADIUS OF INFLUENCE MAP

MOBIL STATION 18MLJ
5005 North Long Beach Boulevard
Long Beach, California

FN 31630004



PROJECT NO.

3163

PLATE

11

DATE: 09/06/05

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Sample Number	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd	MTBE	TBA	DIPE	ETBE	TAME	Ethanol	Methanol
Samples collected by FREY Environmental, Inc. on January 18 and 29, 2001. Concentrations reported in mg/kg.														
D1-4	4	<0.092	<0.092	<0.092	<0.272	1.1	NA	5.000	2.600 J	<0.092	<0.092	<0.092	NA	NA
D2-4	4	<0.110	<0.110	<0.110	<0.330	1.9	NA	5.500	21.000	<0.110	<0.110	<0.110	NA	NA
D3-4	4	<0.100	<0.100	<0.100	<0.310	34	NA	30.000	140	<0.100	<0.100	0.055 J	NA	NA
D4-4	4	<0.096	<0.096	<0.096	<0.286	0.82	NA	4.800	8.900	<0.096	<0.096	<0.096	NA	NA
D5-4	4	<0.94	<0.94	<0.94	<0.284	53	NA	50.000	69.000	<0.94	<0.94	<0.94	NA	NA
D6-4	4	<0.390	0.270 J	<0.390	0.210 J	1.8	NA	18.000	<19.000	<0.390	<0.390	<0.390	NA	NA
P1-4	4	<0.930	<0.930	<0.930	<2.830	2.1	NA	13.000	<46.000	<0.930	<0.930	<0.930	NA	NA
SP1		<0.0050	<0.0050	<0.0050	<0.010	<0.50	NA	0.017	4.000	<0.010	<0.010	<0.010	NA	NA
SP2		<0.0050	0.0062	0.010	0.177	3.8	NA	0.011	0.610	<0.010	<0.010	<0.010	NA	NA
SP3		<0.0050	<0.0050	<0.0050	<0.0100	<0.50	NA	<0.0050	0.900	<0.010	<0.010	<0.010	NA	NA
SP4		<0.0050	<0.0050	<0.0050	<0.0100	<0.50	NA	0.049	1.700	<0.010	<0.010	<0.010	NA	NA
SP5		<0.0050	<0.0050	<0.0050	0.054	<0.50	NA	0.039	3.500	<0.010	<0.010	<0.010	NA	NA
SP6 (a)		<0.0050	<0.0050	<0.0050	<0.0100	<0.50	NA	<0.0050	0.510	<0.010	<0.010	<0.010	NA	NA
SP7 (a)		<0.0050	<0.0050	<0.0050	<0.0100	<0.50	NA	<0.0050	<0.250	<0.010	<0.010	<0.010	NA	NA
Samples collected by Environmental Resolutions, Inc. on April 14 and 15, 2003. BTEX and fuel oxygenate concentrations reported in µg/kg; TPHg, ethanol and methanol reported in mg/kg.														
S-6-B1	6	0.78 J	0.71 J	<0.98	0.49 J	<0.27	NA	0.28 J	<20	<0.98	<0.98	<0.98	<0.10	<0.10
S-10-B1	10	11	11	1.7	2.57 J	<0.23	NA	<1.9	<19	<0.95	<0.95	<0.95	<0.10	<0.10
S-15-B1	15	0.46 J	<0.89	<0.89	<2.69	<0.25	NA	0.54 J	<18	<0.89	<0.89	<0.89	<0.10	<0.10
S-20-B1	20	<0.84	<0.84	<0.84	<2.54	<0.21	NA	<1.7	<17	<0.84	<0.84	<0.84	<0.10	<0.10
S-25-B1	25	<1.0	<1.0	<1.0	<3.1	<0.24	NA	<2.1	<21	<1.0	<1.0	<1.0	<0.10	<0.10
S-30-B1	30	<0.97	<0.97	<0.97	<2.87	0.12 J	NA	0.28 J	<19	<0.97	<0.97	<0.97	<0.10	<0.10
S-40-B1	40	0.72 J	0.53 J	<0.91	<2.71	0.26	NA	<1.8	<18	<0.91	<0.91	<0.91	<0.10	<0.10
S-50-B1	50	<1.1	<1.1	<1.1	<3.2	0.13 J	NA	<2.1	<21	<1.1	<1.1	<1.1	<0.10	<0.10

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Sample Number	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd	MTBE	TBA	DIPE	ETBE	TAME	Ethanol	Methanol
Samples collected by Environmental Resolutions, Inc. on April 14 and 15, 2003 (continued). BTEX and fuel oxygenate concentrations reported in µg/kg; TPHg, ethanol and methanol reported in mg/kg.														
S-5-B2	5	<98	<98	<98	<298	<0.24	NA	1300	<2000	<98	<98	<98	<0.10	<0.10
S-10-B2	10	<88	<88	<88	<268	<0.23	NA	2600	<1800	<88	<88	<88	<0.10	<0.10
S-15-B2	15	<88	<88	<88	<268	0.070 J	NA	1000	<1800	<88	<88	<88	<0.10	<0.10
S-20-B2	20	3.1	<0.87	11	3.85	0.15 J	NA	36	13 J	<0.87	<0.87	<0.87	<0.10	<0.10
S-25-B2	25	1.0	<0.98	6.4	<2.98	0.17 J	NA	700	220	<0.98	<0.98	<0.98	<0.10	<0.10
S-30-B2	30	<98	<98	<98	<298	0.13 J	NA	1300	<2000	<98	<98	<98	<0.10	<0.10
S-35-B2	35	<1.0	0.42 J	<1.0	0.27 J	0.083 J	NA	1.8 J	<20	<1.0	<1.0	<1.0	<0.10	<0.10
S-40-B2	40	0.16 J	0.38 J	4.9	1.61 J	0.15 J	NA	1.3 J	<20	<0.99	<0.99	<0.99	<0.10	<0.10
S-45-B2	45	<95	2100	620	3600	83	NA	39 J	<1900	<95	<95	<95	<0.10	<0.10
S-50-B2	50	<370	45000	16000	92000	1300	NA	<740	<7400	<370	<370	<370	<0.10	<0.10
S-10-B3	10	<190	<190	<190	212 J	0.68	NA	21000	<3700	<190	<190	<190	<0.10	<0.10
S-15-B3	15	37 J	220	1000	8600	4.4	NA	6700	<1800	<90	<90	<90	<0.10	<0.10
S-20-B3	20	2.7	0.35 J	90	140.95	2.4	NA	720	23	<0.82	<0.82	<0.82	<0.10	<0.10
S-25-B3	25	0.60 J	0.45 J	6.3	20.1	0.12 J	NA	270	56	<0.92	<0.92	<0.92	<0.10	<0.10
S-30-B3	30	<0.97	<0.97	0.35 J	1.63 J	0.22	NA	5.9	<19	<0.97	<0.97	<0.97	<0.10	<0.10
S-35-B3	35	<110	<107	78 J	500	1.1	NA	1300	<2100	<110	<110	<110	NA	NA
S-45-B3	45	0.48 J	2.0	12	85	0.79	NA	150 J	45	<0.89	<0.89	<0.89	<0.10	<0.10
S-50-B3	50	0.35 J	1.5	10	71	0.46	NA	300	58	<0.87	<0.87	<0.87	<0.10	<0.10
Samples collected by Environmental Resolutions, Inc. on October 26 through 28, 2004. Concentrations reported in mg/kg.														
S-10-B4	10	0.0044	0.0039	<0.0013	<0.0013	<5.00	<10.1	<0.0013	<0.0321	<0.0013	<0.0013	<0.0013	<0.128	<10.0
S-15-B4	15	<0.0015	<0.0015	<0.0015	<0.0015	<5.00	<9.96	<0.0015	<0.0378	<0.0015	<0.0015	<0.0015	<0.151	<10.0
S-20-B4	20	<0.0011	<0.0011	<0.0011	<0.0011	<5.00	<10.1	<0.0011	<0.0274	<0.0011	<0.0011	<0.0011	<0.109	<10.0
S-25-B4	25	<0.0019	<0.0019	<0.0019	<0.0019	<5.00	<9.88	<0.0019	<0.0468	<0.0019	<0.0019	<0.0019	<0.187	29.8
S-30-B4	30	<0.0014	<0.0014	<0.0014	<0.0014	<5.00	<10.1	<0.0014	<0.0358	<0.0014	<0.0014	<0.0014	<0.143	25.1
S-35-B4	35	<0.0013	<0.0013	<0.0013	<0.0013	<5.00	<10.1	<0.0013	<0.0319	<0.0013	<0.0013	<0.0013	<0.128	<10.0
S-40-B4	40	<0.0012	<0.0012	<0.0012	<0.0012	<5.00	<10.0	<0.0012	<0.0303	<0.0012	<0.0012	<0.0012	<0.121	51.3
S-45-B4	45	<0.0014	<0.0014	<0.0014	<0.0014	<5.00	<9.88	<0.0014	<0.0356	<0.0014	<0.0014	<0.0014	<0.142	<10.0
S-50-B4	50	<0.0010	<0.0010	<0.0010	<0.0010	<5.00	<10.0	<0.0010	<0.0256	<0.0010	<0.0010	<0.0010	<0.102	<10.0
S-10-B5	10	0.0035	0.0027	0.0031	0.0148	<5.00	<10.1	<0.0013	<0.0333	<0.0013	<0.0013	<0.0013	<0.133	<10.0
S-15-B5	15	<0.0013	<0.0013	<0.0013	<0.0013	<5.00	<10.0	<0.0013	<0.0325	<0.0013	<0.0013	<0.0013	<0.130	<10.0
S-20-B5	20	0.0018	<0.0016	<0.0016	0.0026	<5.00	<9.88	<0.0016	<0.0399	<0.0016	<0.0016	<0.0016	<0.159	<10.0
S-25-B5	25	<0.0023	<0.0023	<0.0023	<0.0023	<5.00	<10.0	<0.0023	<0.0576	<0.0023	<0.0023	<0.0023	<0.230	199
S-30-B5	30	<0.0012	<0.0012	<0.0012	<0.0012	<5.00	<9.88	<0.0012	<0.0292	<0.0012	<0.0012	<0.0012	<0.117	17.3
S-35-B5	35	<0.0012	<0.0012	<0.0012	<0.0012	<5.00	<10.1	<0.0012	<0.0302	<0.0012	<0.0012	<0.0012	<0.121	<10.0

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Sample Number	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd	MTBE	TBA	DIPE	ETBE	TAME	Ethanol	Methanol
Samples collected by Environmental Resolutions, Inc. on October 26 through 28, 2004 (continued). Concentrations reported in mg/kg.														
S-45-B5	45	<0.0016	0.0028	0.0073	0.0103	<5.00	<10.0	<0.0016	<0.0394	<0.0016	<0.0016	<0.0016	<0.158	57.0
S-50-B5	50	<0.0011	0.0131	0.0349	0.0558	<5.00	<9.92	<0.0011	<0.0278	<0.0011	<0.0011	<0.0011	<0.111	<10.0
S-10-B6	10	0.0058	0.0048	<0.0016	<0.0016	<5.00	<10.0	<0.0016	<0.0388	<0.0016	<0.0016	<0.0016	<0.155	<10.0
S-15-B6	15	<0.0015	<0.0015	<0.0015	<0.0015	<5.00	<9.80	<0.0015	<0.0382	<0.0015	<0.0015	<0.0015	<0.153	<10.0
S-20-B6	20	<0.0014	<0.0014	<0.0014	<0.0014	<5.00	<10.1	<0.0014	<0.0362	<0.0014	<0.0014	<0.0014	<0.145	<10.0
S-25-B6	25	<0.0014	<0.0014	<0.0014	<0.0014	<5.00	<10.1	<0.0014	<0.0344	<0.0014	<0.0014	<0.0014	<0.138	49.8
S-30-B6	30	<0.0013	<0.0013	<0.0013	<0.0013	<5.00	<10.1	<0.0013	<0.0334	<0.0013	<0.0013	<0.0013	<0.134	<10.0
S-35-B6	35	0.0023	0.0015	<0.0014	<0.0014	<5.00	<10.0	<0.0014	<0.0353	<0.0014	<0.0014	<0.0014	<0.141	<10.0
S-40-B6	40	<0.0012	<0.0012	<0.0012	<0.0012	<5.00	<10.1	<0.0012	<0.0312	<0.0012	<0.0012	<0.0012	<0.125	<10.0
S-45-B6	45	<0.0013	<0.0013	0.112	0.0608	<5.00	<10.1	<0.0013	<0.0318	<0.0013	<0.0013	<0.0013	<0.127	<10.0
S-50-B6	50	<0.0013	<0.0013	0.0930	0.0486	<5.00	<9.92	<0.0013	<0.0325	<0.0013	<0.0013	<0.0013	<0.130	<10.0
Samples collected by Environmental Resolutions, Inc. on March 16, 2005. Concentrations reported in mg/kg.														
S-10-B7	10	0.0063	0.0035	0.0026	0.0113	<4.87 J	67.7	<0.0017	<0.0427	<0.0017	<0.0017	<0.0017	<0.171	<5.00
S-15-B7	15	0.0009 J	<0.0016	<0.0016	<0.0016	<4.76	<1.00 J	<0.0016	<0.0394	<0.0016	<0.0016	<0.0016	<0.158	<5.00
S-20-B7	20	0.0025	0.0075	0.0097	0.0567	<4.74	<1.01 J	<0.0015	<0.0369	<0.0015	<0.0015	<0.0015	<0.147	<5.00
S-25-B7	25	<0.0017	<0.0017	<0.0017	<0.0017	<5.01	<1.00 J	<0.0017	<0.0427	<0.0017	<0.0017	<0.0017	<0.171	<5.00
S-30-B7	30	0.0025	<0.0016	0.0011 J	0.0049	<4.87	6.37	<0.0016	<0.0408	<0.0016	<0.0016	<0.0016	<0.163	<5.00
S-35-B7	35	0.0013 J	<0.0018	0.0025	0.0154	<4.86	<1.01 J	<0.0018	<0.0450	<0.0018	<0.0018	<0.0018	<0.180	<5.00
S-40-B7	40	<0.0019	<0.0019	<0.0019	<0.0019	<4.94	<1.01 J	<0.0019	<0.0465	<0.0019	<0.0019	<0.0019	<0.186	<5.00
S-45-B7	45	<0.0018	<0.0018	<0.0018	0.0012 J	<4.97	<1.01 J	<0.0018	<0.0456	<0.0018	<0.0018	<0.0018	<0.182	<5.00
S-50-B7	50	<0.0017	<0.0017	<0.0017	<0.0017	<4.80	<1.00 J	<0.0017	<0.0420	<0.0017	<0.0017	<0.0017	<0.168	<5.00
Samples collected by Environmental Resolutions, Inc. on May 31, June 1 and 2, 2005. Concentrations reported in µg/kg.														
S-5-B8	5	3.5	1.6 J	<2.7	<2.7	360 J	670 J	885	1070	<2.7	<2.7	<2.7	<270	NA
S-10-B8	10	7.3	5.8	1.2 J	1.6 J	11100	740 J	1.1 J	8540	<1.8	<1.8	<1.8	<177	NA
S-15-B8	15	1.3 J	1.3 J	0.9 J	1.2 J	700 J	920 J	2.0	7900	<1.7	<1.7	<1.7	<167	NA
S-20-B8	20	1.1 J	<1.5	53.4	1.5	1890	620 J	15.8	3140	<1.5	<1.5	<1.5	<152	NA
S-25-B8	25	16.0	3.5	15.3	26.2	400 J	780 J	224	545	<1.8	<1.8	<1.8	<180	NA
S-30-B8	30	1.4 J	1.6 J	271	45.9	1210	640 J	7.2	<43.7	<1.7	<1.7	<1.7	<175	NA
S-35-B8	35	<1.6	<1.6	1.0 J	<1.6	<1000	560 J	<1.6	<40.8	<1.6	<1.6	<1.6	<163	NA
S-40-B8	40	0.7 J	46.1	643	1270	12900	106000	<1.8	<46.0	<1.8	<1.8	<1.8	<184	NA
S-5-B9	5	8.6	451	260	1210	<1000	760 J	799	<46.5	<1.9	<1.9	<1.9	<186	NA
S-10-B9	10	3.0	4.4	2.0	7.5	6380	720 J	9400	1150	<1.7	<1.7	4.8	<171	NA
S-15-B9	15	91.8	2320	3520	22700	180000	2590	12800	<41.0	<1.6	<1.6	<1.6	<164	NA
S-20-B9	20	831	74400	47600	275000	539000	5790	31700	11400	<78.7	<78.7	<78.7	<7870	NA
S-25-B9	25	34.3	445	140	705	1800000	43400	6850	625	<1.4	<1.4	<1.4	<137	NA
S-30-B9	30	<1.6 J	17.4	1800	105	316000	13800	11.5	<41.7	<1.7	<1.7	<1.7	<167	NA
S-35-B9	35	7.3	1330	1020	5770	9570	2240	1050	363	<1.8	<1.8	<1.8	<180	NA
S-40-B9	40	<86.2	47.4 J	77.6 J	172	1060000	129000	64.7 J	<2160	<86.2	<86.2	<86.2	<8620	NA

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Sample Number	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd	MTBE	TBA	DIPE	ETBE	TAME	Ethanol	Methanol
Samples collected by Environmental Resolutions, Inc. on May 31, June 1 and 2, 2005 (continued). Concentrations reported in ug/kg.														
S-5-B10	5	5.9	5.9	0.9 J	<2.1	<100	1060	33.2	43.7 J	<2.1	<2.1	<2.1	<211	NA
S-10-B10	10	3.5	3.1	<2.0	<2.0	100	750 J	32.5	152	<2.0	<2.0	<2.0	<196	NA
S-15-B10	15	1.8 J	1.9	<1.9	<1.9	400	2770	552	716	<1.9	<1.9	<1.9	<187	NA
S-20-B10	20	1.8	2.4	2.6	11.1	<100	4640	253	58.4	<1.5	<1.5	<1.5	<154	NA
S-25-B10	25	6.1	13.8	95.1	165	<100	760 J	194	<69.4	<2.8	<2.8	<2.8	<278	NA
S-30-B10	30	0.8 J	1.7 J	1.2 J	3.6	<100	920 J	20.7	21.2 J	<1.8	<1.8	<1.8	<175	NA
S-35-B10	35	1.2 J	1.2 J	1.3 J	<1.7	<100	440 J	8.9	<43.0	<1.7	<1.7	<1.7	<172	NA
S-40-B10	40	1.3 J	1.5 J	3.4	6.8	110	1130	29.6	<46.5	<1.9	<1.9	<1.9	<186	NA
S-10-B11	10	7.3	5.8	<1.6	10.3	<1000	NA	666	51.6	<1.6	<1.6	<1.6	<164	NA
S-15-B11	15	<1.7	<1.7	<1.7	25.1	<1000	NA	168	<42.1	<1.7	<1.7	<1.7	<168	NA
S-20-B11	20	<1.5	<1.5	<1.5	2.9	<1000	NA	27.4	<38.3	<1.5	<1.5	<1.5	<153	NA
S-25-B11	25	<1.8	<1.8	<1.8	<1.8	<1000	NA	15.4	<43.9	<1.8	<1.8	<1.8	<175	NA
S-30-B11	30	<1.7	<1.7	<1.7	<1.7	<1000	NA	<1.7	<43.4	<1.7	<1.7	<1.7	<174	NA
S-35-B11	35	<2.0	<2.0	<2.0	<2.0	<1000	NA	<2.0	<49.2	<2.0	<2.0	<2.0	<197	NA
S-40-B11	40	<2.0	<2.0	<2.0	<2.0	<1000	NA	<2.0	<49.3	<2.0	<2.0	<2.0	<197	NA

EXPLANATION:

mg/kg = milligrams per kilogram;

µg/kg = micrograms per kilogram

BTEX = benzene, toluene, ethylbenzene and total xylenes

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether analyzed by Environmental Protection Agency Method 8260B

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPHd = total petroleum hydrocarbons as diesel

TPHg = total petroleum hydrocarbons as gasoline

(a) = samples analyzed for total lead; results were: SP6, 8.27 mg/kg; SP7, 13.2 mg/kg

D = dispenser island; P = product line; SP = stockpile

J = estimated value between method detection limit and practical quantitation limit

NA = not analyzed

<8620 = not detected at or above stated laboratory reporting limit

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

<i>Date</i>	<i>Well Elev</i>	<i>GW Depth</i>	<i>GW Elev</i>	<i>LPH</i>	<i>Benzene (ug/l)</i>	<i>Toluene (ug/l)</i>	<i>Ethyl- benzene (ug/l)</i>	<i>Xylenes (ug/l)</i>	<i>TPHg (ug/l)</i>	<i>TPHd (ug/l)</i>	<i>TRPH (ug/l)</i>	<i>MTBE (ug/l)</i>	<i>DIPE (ug/l)</i>	<i>ETBE (ug/l)</i>	<i>TAME (ug/l)</i>	<i>TBA (ug/l)</i>	<i>Ethanol (ug/l)</i>	<i>Methanol (ug/l)</i>
Field Point MW1																		
4/17/2003	41.10	29.66	11.44	no	<1.00	<1.00	<1.00	<1.00	230	133	<100	<2.00	<1.00	<1.00	<1.00	<10.0	<1000	<10000
8/26/2003	41.10	29.52	11.58	no	<1.00	<1.00	<1.00	<1.00	97.4	<500		<2.00	<1.00	<1.00	<1.00	<10.0	<1000	<10000
11/14/2003	41.10	29.88	11.22	no	<1.00	<1.00	<1.00	<1.00	<50.0	<500		<2.00	<1.00	<1.00	<1.00	<10.0		
2/21/2004	41.10	30.03	11.07	no	<1.00	<1.00	<1.00	<1.00	<50.0	<500		<2.00	<1.00	<1.00	<1.00	<10.0	<1000	<10000
4/30/2004	41.10	29.85	11.25	no	<1.00	<1.00	<1.00	<1.00	<50.0	<500		<2.00	<1.00	<1.00	<1.00	69.0		
7/10/2004	41.10	30.50	10.60	no	<1.00	<1.00	<1.00	<1.00	231	<500		2.90	<1.00	<1.00	<1.00	<10.0		
11/5/2004	41.10	30.52	10.58	no	<1.00	<1.00	<1.00	<1.00	<50.0	<500		<2.00	<1.00	<1.00	<1.00	<10.0		
3/21/2005	41.10	29.21	11.89	no	0.70	<0.50	0.60	3.40	<50.0	<500		6.10	<1.00	<1.00	1.00	17.0	<200	<5000
6/2/2005	41.10	28.32	12.78	no	<0.50	<0.50	<0.50	<0.50	82.9	<500		1.90	<1.00	<1.00	<1.00	9.20 J		
8/4/2005	41.10	27.92	13.18	no	<0.500	<0.500	<0.500	<0.500	308	<500		1.47	<1.00	<1.00	<1.00	<10.0		
Field Point MW2																		
4/17/2003	39.55	28.43	11.12	no	5.90	3660	1340	3940	19900	2980	<100	131	<1.00	<1.00	<1.00	<10.0	<1000	<10000
8/26/2003	39.55	28.31	11.24	no	118	1220	1260	625	15600	1490		5200	<1.00	<1.00	5.70	85.1	<1000	<10000
11/14/2003	39.55	28.66	10.89	no	68.0	1280	1280	770	9810	1110		4260	<1.00	<1.00	<1.00	142		
2/21/2004	39.55	28.82	10.73	no	47.1	560	1220	775	10600	1710		975	<1.00	<1.00	<1.00	56.5	<1000	<10000
4/30/2004	39.55	28.62	10.93	no	61.0	424	1390	550	9090	872		1040	<1.00	<1.00	<1.00	<10.0		
7/10/2004	39.55	29.34	10.21	no	60.4	348	1260	402	8260	1220		920	<1.00	<1.00	<1.00	125		
11/5/2004	39.55	29.31	10.24	no	66.7	238	930	190	6360	878		220	<1.00	<1.00	<1.00	<10.0		
3/21/2005	39.55	27.96	11.59	no	80.7	125	538	90.1	2670	<500		1370	<1.00	0.60 J	0.70 J	522	<200	<5000

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

<i>Date</i>	<i>Well Elev</i>	<i>GW Depth</i>	<i>GW Elev</i>	<i>LPH</i>	<i>Benzene (ug/l)</i>	<i>Toluene (ug/l)</i>	<i>Ethyl- benzene (ug/l)</i>	<i>Xylenes (ug/l)</i>	<i>TPHg (ug/l)</i>	<i>TPHd (ug/l)</i>	<i>TRPH (ug/l)</i>	<i>MTBE (ug/l)</i>	<i>DIPE (ug/l)</i>	<i>ETBE (ug/l)</i>	<i>TAME (ug/l)</i>	<i>TBA (ug/l)</i>	<i>Ethanol (ug/l)</i>	<i>Methanol (ug/l)</i>
6/2/2005	39.55	27.02	12.53	no	307	124	1630	277	16000	510		6780	<1.00	<1.00	<1.00	3550		
8/4/2005	39.55	26.62	12.93	no	6.26	181	855	307	5820	101 J		435	<1.00	<1.00	<1.00	129		
Field Point MW3																		
4/17/2003	40.84	29.34	11.50	no	<1.00	<1.00	1.50	7.70	2530	916	<100	105	<1.00	<1.00	<1.00	45.4	<1000	<10000
8/26/2003	40.84	29.26	11.58	no	<1.00	<1.00	1.60	<1.00	162	<500		112	<1.00	<1.00	<1.00	<10.0	<1000	<10000
11/14/2003	40.84	29.57	11.27	no	<1.00	<1.00	2.40	<1.00	179	<500		87.2	<1.00	<1.00	<1.00	<10.0		
2/21/2004	40.84	29.73	11.11	no	1.20	<1.00	2.30	<1.00	170	<500		116	<1.00	<1.00	<1.00	<10.0	<1000	<10000
4/30/2004	40.84	29.57	11.27	no	<1.00	<1.00	2.00	6.40	138	<500		137	<1.00	<1.00	<1.00	<10.0		
7/10/2004	40.84	30.31	10.53	no	<1.00	<1.00	2.80	<1.00	139	<500		89.6	<1.00	<1.00	<1.00	<10.0		
11/5/2004	40.84	30.25	10.59	no	1.50	<1.00	4.30	<1.00	181	<500		182	<1.00	<1.00	<1.00	50.3		
3/21/2005	40.84	28.88	11.96	no	2.60	<0.50	1.20	1.00	222	<500		120	<1.00	<1.00	<1.00	97.4	<200	<5000
6/2/2005	40.84	28.01	12.83	no	0.80	<0.50	0.50	<0.50	260	<500		167	<1.00	<1.00	<1.00	105		
8/4/2005	40.84	27.61	13.23	no	0.730	<0.500	1.06	<0.500	159	<500		140	<1.00	<1.00	<1.00	<10.0		
Field Point MW4																		
11/5/2004	39.10	30.85	8.25	no	23.7	<1.00	<1.00	<1.00	247	<500		27.1	<1.00	<1.00	<1.00	5760		
3/21/2005	39.10	27.51	11.59	no	35.6	<0.50	0.90	13.8	2060	831		76.6	<1.00	1.20	1.10	49700	<200	1800 J
6/2/2005	39.10	26.62	12.48	no	8.70	<0.50	0.50	<0.50	538	<500		60.9	<1.00	<1.00	<1.00	19300		
8/4/2005	39.10	26.21	12.89	no	0.510	<0.500	<0.500	<0.500	1950	<500		<1.00	<1.00	<1.00	<1.00	51.4		
Field Point MW5																		
11/5/2004	38.72	28.74	9.98	no	<1.00	119	280	900	6520	1330		<2.00	<1.00	<1.00	<1.00	<10.0		
3/21/2005	38.72	27.39	11.33	no	23.1	<0.50	8.10	1.40	1420	560		9.70	<1.00	<1.00	<1.00	5250	<200	<5000

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Date	Well Elev	GW Depth	GW Elev	LPH	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TRPH (ug/l)	MTBE (ug/l)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)	Ethanol (ug/l)	Methanol (ug/l)
6/2/2005	38.72	26.48	12.24	no	0.90	2.40	1.80	2.90	315	<500		2.00	<1.00	<1.00	<1.00	697		
8/4/2005	38.72	26.08	12.64	no	5.14	54.9	140	229	2000	<500		4.40	<1.00	<1.00	<1.00	216		
Field Point MW6																		
11/5/2004	39.21	29.11	10.10	no	3.50	5.00	1120	404	8090	1580		<2.00	<1.00	<1.00	<1.00	<10.0		
3/21/2005	39.21	27.76	11.45	no	<0.50	<0.50	585	122	3960	749		<1.00	<1.00	<1.00	<1.00	<50.0	<200	1200 J
6/2/2005	39.21	26.85	12.36	no	<0.50	0.40 J	826	116	5330	<500		<1.00	<1.00	<1.00	<1.00	<10.0		
8/4/2005	39.21	26.44	12.77	no	<0.500	1.94	685	94.3	4910	197 J		1.91	<1.00	<1.00	<1.00	<10.0		
Field Point MW7																		
3/21/2005	41.14	29.09	12.05	no	<0.50	<0.50	<0.50	<0.50	<50.0	<500		0.50 J	<1.00	<1.00	<1.00	4.70 J	<200	<5000
6/2/2005	41.14	28.13	13.01	no	<0.50	0.30 J	<0.50	<0.50	<50.0	<500		<1.00	<1.00	<1.00	<1.00	<10.0		
8/4/2005	41.14	27.79	13.35	no	<0.500	<0.500	<0.500	<0.500	79.0	<500		<1.00	<1.00	<1.00	<1.00	47.2		
Field Point Trip Blank																		
4/17/2003				no	<1.00	<1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0	<1000	<10000
8/26/2003				no	<1.00	<1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
11/14/2003				no	<1.00	<1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
2/21/2004				no	<1.00	<1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
4/30/2004				no	<1.00	1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
7/10/2004				no	<1.00	<1.00	<1.00	<1.00	50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
11/5/2004				no	<1.00	<1.00	<1.00	<1.00	<50.0			<2.00	<1.00	<1.00	<1.00	<10.0		
3/21/2005				no	<0.50	<0.50	<0.50	<0.50	<50.0			<1.00	<1.00	<1.00	<1.00	<10.0		
6/2/2005				no	<0.50	<0.50	<0.50	<0.50	<50.0			<1.00	<1.00	<1.00	<1.00	<10.0		

TABLE 2
 CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
 MOBIL STATION 18MLJ
 5005 NORTH LONG BEACH BOULEVARD
 LONG BEACH, CALIFORNIA
 ERI 3163

Date	Well Elev	GW Depth	GW Elev	LPH	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TRPH (ug/l)	MTBE (ug/l)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)	Ethanol (ug/l)	Methanol (ug/l)
8/4/2005				no	<0.500	<0.500	<0.500	<0.500	<50.0			<1.00	<1.00	<1.00	<1.00	<10.0		

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Explanation:

ELEV = elevation

EPA = Environmental Protection Agency

GW = groundwater

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPHd = total petroleum hydrocarbons as diesel

TPHg = total petroleum hydrocarbons as gasoline

TRPH = total recoverable petroleum hydrocarbons

MTBE = methyl tertiary butyl ether

MTBE analyzed by EPA Method 8260B.

LPH = liquid phase hydrocarbons (thickness measured in feet)

J = estimated value between method detection limit and practical quantification limit

<10000 = not detected at or above stated laboratory reporting limit

ug/l = micrograms per liter

TABLE 3
SOIL VAPOR ANALYTICAL RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Sample Number	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	TPHg	MTBE	TBA	DIPE	ETBE	TAME
Samples collected by Environmental Resolutions, Inc. on July 6 and 7, 2005. Concentrations reported in ppmv.										
I-SVE COMB-A	9.6	80	56	128	9800	81	<5.0	<5.0	<5.0	<5.0
I-SVE COMB-B	13	85	49	117	7000	140	3.9	<3.0	<3.0	<3.0
I-SVE1D-A	23	31	37	53	16000	17	<7.0	<7.0	<7.0	<7.0
I-SVE1D-B	32	120	56	124	17000	110	<6.0	<6.0	<6.0	<6.0
I-SVE1S-A	0.47	5.1	3.3	9.3	820	9.1	8.0	<0.50	<0.50	<0.50
I-SVE1S-B	0.54	1.9	1.7	3.9	960	24	7.7	<0.45	<0.45	<0.45

Explanation:

ppmv = parts per million by volume

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether analyzed by Environmental Protection Agency Method TO-15M

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPHg = total petroleum hydrocarbons as gasoline

<7.0 = not detected at or above the stated laboratory reporting limit

TABLE 4
EXTRACTION WELL DATA - SVE RADIUS OF INFLUENCE (Deep Zone)
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Extraction Well: SVE1-D; TDW =

Date	Time	Field Gas Analyzer Reading (ppmv)	Vapor Sample ID	Vacuum on Well (in. H ₂ O)	Flow From Well (scfm)	Vacuum @ System (in. H ₂ O)
				SVE1	SVE1	
07/06/05	1010	--	--	--	--	--
07/06/05	1015	807	--	95	11	--
07/06/05	1020	--	I-SVE1D-A	95	11	--
07/06/05	1025	818	--	95	11	--
07/06/05	1030	--	--	95	11	--
07/06/05	1035	809	--	95	11	--
07/06/05	1040	813	--	95	11	--
07/06/05	1110	831	--	110	11	--
07/06/05	1140	796	--	108	11	--
07/06/05	1210	848	--	109	11	--
07/06/05	1240	826	I-SVE1D-B	108	11	--
07/06/05	1310	813	--	108	11	--
End Test						

EXPLANATION:

ppmv = parts per million by volume

TDW = total depth of well

in. H₂O = inches of water

scfm = standard cubic feet per minute

Analyzer used: MiniRAE Plus Classic® PID

TABLE 5
OBSERVATION WELL DATA - SVE RADIUS OF INFLUENCE (Deep Zone)
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

		SVE2		SVE3		MW6	SVE4	
Distance from extraction well: SVE1		Distance = 15' TD =		Distance = 25' TD =		Distance = 53' TD =	Distance = 70' TD =	
DATE	TIME	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)	Induced Vacuum (in. H ₂ O)	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)
07/06/05	1010	0.00	0.01	0.00	0.00	0.02	0.00	0.00
07/06/05	1015	-0.11	-4.34	-0.03	-1.46	-0.11	0.00	-0.04
07/06/05	1020	-0.10	-4.01	-0.03	-1.36	-0.08	-0.01	-0.05
07/06/05	1025	-0.10	-3.96	-0.03	-1.33	-0.08	0.00	-0.05
07/06/05	1030	-0.10	-3.90	-0.03	-1.30	-0.08	-0.01	-0.06
07/06/05	1035	-0.10	-3.89	-0.03	-1.28	-0.08	-0.01	-0.06
07/06/05	1040	-0.10	-3.85	-0.02	-1.27	-0.09	0.00	-0.06
07/06/05	1110	-0.10	-3.85	-0.05	-1.25	-0.07	-0.01	-0.05
07/06/05	1140	-0.10	-3.77	-0.02	-1.20	-0.06	0.00	-0.04
07/06/05	1210	-0.10	-3.77	-0.02	-1.19	-0.06	0.01	-0.04
07/06/05	1240	-0.10	-3.74	-0.02	-1.17	-0.05	0.01	-0.02
07/06/05	1310	-0.07	-3.67	-0.02	-1.16	-0.06	0.01	-0.02

EXPLANATION:

TD = total depth of well

In. H₂O = inches of water

TABLE 6
EXTRACTION WELL DATA - SVE RADIUS OF INFLUENCE (Shallow Zone)
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Extraction Well: SVE1-S; TDW =

Date	Time	Field Gas Analyzer Reading (ppmv)	Vapor Sample ID	Vacuum on Well (in. H ₂ O)	Flow From Well (scfm)	Vacuum @ System (in. H ₂ O)
				SVE1	SVE1	
07/06/05	1410	--	--	--	--	--
07/06/05	1415	324	--	105	9	--
07/06/05	1420	288	I-SVE1S-A	130	11	--
07/06/05	1425	264	--	130	11	--
07/06/05	1430	219	--	130	11	--
07/06/05	1435	221	--	130	11	--
07/06/05	1440	219	--	130	11	--
07/06/05	1510	257	--	128	12	--
07/06/05	1540	247	--	120	12	--
07/06/05	1610	250	--	118	13	--
07/06/05	1640	246	--	116	13	--
07/06/05	1710	253	I-SVE1S-B	116	13	--
End Test						

EXPLANATION:

TDW = total depth of well

ppmv = parts per million by volume

in. H₂O = inches of water

scfm = standard cubic feet per minute

Analyzer used: MiniRAE Plus Classic® PID

TABLE 7
OBSERVATION WELL DATA - SVE RADIUS OF INFLUENCE (Shallow Zone)
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

		SVE2		SVE3		MW6	SVE4	
Distance from extraction well: SVE1		Distance = 15' TD =		Distance = 25' TD =		Distance = 53' TD =	Distance = 70' TD =	
DATE	TIME	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)	Induced Vacuum (in. H ₂ O)	Induced Vacuum Shallow Zone (in. H ₂ O)	Induced Vacuum Deep Zone (in. H ₂ O)
07/06/05	1410	0.00	-0.02	0.02	0.00	0.02	0.02	0.03
07/06/05	1415	-0.08	-0.10	0.01	-0.04	0.01	0.00	0.01
07/06/05	1420	-0.15	-0.20	0.00	-0.09	0.00	0.00	0.00
07/06/05	1425	-0.22	-0.28	0.00	-0.11	0.00	0.00	0.00
07/06/05	1430	-0.29	-0.39	-0.01	-0.16	0.00	0.01	0.01
07/06/05	1435	-0.31	-0.43	0.00	-0.16	0.00	0.00	0.00
07/06/05	1440	-0.30	-0.43	0.00	-0.17	0.00	0.00	0.00
07/06/05	1510	-0.29	-0.42	0.01	-0.16	0.00	0.01	0.01
07/06/05	1540	-0.32	-0.45	0.01	-0.17	0.00	0.00	0.01
07/06/05	1610	-0.33	-0.46	0.01	-0.18	0.00	0.00	0.00
07/06/05	1640	-0.38	-0.51	-0.02	-0.20	0.00	0.00	-0.01
07/06/05	1710	-0.36	-0.51	-0.03	-0.20	0.00	0.00	-0.01

EXPLANATION:

TD = total depth of well
 In. H₂O = inches of water

TABLE 8
INJECTION WELL DATA - AIR SPARGING RADIUS OF INFLUENCE
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Injection Well: AS1; TDW = ____, DTW = NA

Date	Time	Pressure on Well (psi)	Flow To Well (scfm)	Vacuum @ System (in. H ₂ O)
		AS1	AS1	
07/07/05	0915	8.0	6	--
07/07/05	0920	7.5	6	--
07/07/05	0925	7.0	6	--
07/07/05	0930	7.0	6	--
07/07/05	0935	7.0	6	--
07/07/05	0940	6.75	6	--
07/07/05	1010	6.5	6	--
07/07/05	1040	8.25	22	--
07/07/05	1110	7.5	23	--
07/07/05	1140	8.5	36.5	--
07/07/05	1210	8.0	36	--
07/07/05	1240	7.5	36	--
07/07/05	1310	7.0	36	--
End Test				

EXPLANATION:

psi = pounds per square inch

scfm = standard cubic feet per minute

in H₂O = inches of water

TABLE 9
OBSERVATION WELL DATA - AIR SPARGING RADIUS OF INFLUENCE
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

		MW2	AS2	AS3	MW6	MW1	AS4
Distance from injection well: AS1		Distance = 13'	Distance = 15'	Distance = 25'	Distance = 53'	Distance = 66'	Distance = 70'
DATE	TIME	Induced Pressure (in. H ₂ O)	Induced Pressure (in. H ₂ O)	Induced Pressure (in. H ₂ O)	Induced Pressure (in. H ₂ O)	Induced Pressure (in. H ₂ O)	Induced Pressure (in. H ₂ O)
07/07/05	Baseline	0.00	0.03	0.04	0.02	0.01	0.01
07/07/05	0915	1.01	2.07	0.24	0.13	0.04	0.03
07/07/05	0920	1.33	2.98	0.45	0.23	0.08	0.04
07/07/05	0925	1.53	2.91	0.55	0.28	0.17	0.03
07/07/05	0930	1.57	2.01	0.50	0.26	0.20	0.03
07/07/05	0935	1.57	1.31	0.43	0.25	0.23	0.01
07/07/05	0940	1.63	0.85	0.32	0.20	0.23	0.01
07/07/05	1010	1.97	0.49	0.08	0.19	0.21	0.01
07/07/05	1040	10.90	6.50	1.67	1.40	1.22	0.01
07/07/05	1110	11.86	0.78	0.05	1.13	1.24	0.01
07/07/05	1140	24.50	9.83	2.22	3.13	1.96	0.02
07/07/05	1210	25.00	2.58	0.31	3.35	2.21	0.01
07/07/05	1240	23.00	0.06	-0.35	3.43	2.90	0.00
07/07/05	1310	21.00	-0.29	-0.33	3.48	2.93	0.00

EXPLANATION:

In. H₂O = inches of water

TABLE 10
AIR SPARGING OBSERVATION WELL DATA - DEPTH TO WATER & DISSOLVED OXYGEN
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

		AS2	AS3	AS4	MW2		MW6		MW1	
Distance from injection well: AS1		Distance = 15'	Distance = 25'	Distance = 70'	Distance = 13'		Distance = 53'		Distance = 66'	
DATE	TIME	Depth To Water (feet BTOC)	Depth To Water (feet BTOC)	Depth To Water (feet BTOC)	Depth To Water (feet BTOC)	Dissolved Oxygen (mg/l)	Depth To Water (feet BTOC)	Dissolved Oxygen (in. H ₂ O)	Depth To Water (feet BTOC)	Dissolved Oxygen (in. H ₂ O)
07/07/05	0900	27.13	26.55	27.99	26.87	0.51	26.69	0.48	28.12	0.52
07/07/05	1010	--	--	--	--	0.68	--	0.54	--	0.58
07/07/05	1110	--	--	--	--	0.98	--	0.62	--	0.60
07/07/05	1210	--	--	--	--	0.78	--	0.58	--	0.73
07/07/05	1310	--	--	--	--	1.21	--	0.85	--	0.72
07/07/05	1320	26.75	26.09	27.74	26.61	--	26.40	--	27.82	--

EXPLANATION:

In. H₂O = inches of water

BTOC = below top of casing

mg/l = milligrams per liter

TABLE 11
EXTRACTION WELL DATA - MASS REMOVAL
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

Extraction Well: AS/SVE1 (shallow & deep)

Extraction Well: AS/SVE2 (shallow & deep)

Extraction Well: AS/SVE3 (shallow & deep)

Injection Well: AS1

Date	Time	Field Gas Analyzer Reading (ppmv)	Vapor Sample ID	Air Sparge Pressure (psi)	Air Sparge Flow (scfm)	System Vacuum (in. H ₂ O)	Flow From Wells (scfm)
07/07/05	1400	--	--	--	--	--	--
07/07/05	1410	1146	--	7	36	46	65
07/07/05	1430	1060	I-SVE COMB-A	7	36	60	82
07/07/05	1440	1016	--	7	36	70	87
07/07/05	1500	1079	--	7	36	62	87
07/07/05	1530	1112	--	7	36	62	82
07/07/05	1600	1083	I-SVE COMB-B	7	36	62	82
End Test							

EXPLANATION:

psi = pounds per square inch

scfm = standard cubic feet per minute

in. H₂O = inches of water

Analyzer used: MiniRAE Plus Classic® PID

ppmv = parts per million by volume

TABLE 12
VAPOR EXTRACTION RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

INPUT DATA:

- 1) Air flow rate in standard cubic feet per minute (scfm) at 32° F and 14.7 psia
- 2) Air pressure and temperature at the measuring device (needed for Pitot tube calculations to determine scfm)
- 3) Differential pressure (dP) in inches of water across the Pitot tube (if flow is measured that way)
- 4) Hydrocarbon content of the air (in ppmv as hexane) 86 lb hexane = 359 SCF at 32° F and 14.7 psig
- 5) Length of time - usually hours - over which the flow rate occurred

From periodic measurements, a calculation of total pounds of hydrocarbons removed from a well or from a system is made. The input data listed above are measured as specific points in time. To calculate quantities removed, some assumptions must be made:

ASSUMPTIONS:

- 1) Air flow for the period equals the average of the initial and final readings for the period.
- 2) Pressure and temperature for the entire period will be the final reading.
- 3) Hydrocarbon or MTBE concentration for the period equals the average of the initial and final values.
- 4) The hours of operation can be taken from an hour meter, an electric meter, or can be assumed to be equal to the entire time period between measurements if the equipment operated continuously.
- 5) If the unit is found down, an attempt is made to determine how many hours of operation there were and the data taken for the previous period is used to make the calculations. The unit is restarted and, after a suitable waiting period (usually two hours), data are taken to start the next period.

SINGLE-WELL DEEP-ZONE SVE ROI TEST DATA & CALCULATIONS:

Sample ID	Date	Time	Operating Hours Over Period	Flow (scfm)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	TPHg		Benzene		MTBE	
								Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed
I-SVE1D-A	07/06/05	10:20 AM	0.17	11	16000	23	17						
I-SVE1D-B	07/06/05	1:10 PM	2.83	11	17000	32	110	7.82624	7.82624	0.01185	0.01185	0.03082	0.03082

TPHg
7.826 **Benzene**
0.0118 **MTBE**
0.031

SINGLE-WELL SHALLOW-ZONE SVE ROI TEST DATA & CALCULATIONS:

Sample ID	Date	Time	Operating Hours Over Period	Flow (scfm)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	TPHg		Benzene		MTBE	
								Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed
I-SVE1S-A	07/06/05	2:20 PM	0.17	11	820	0.47	9.1						
I-SVE1S-B	07/06/05	5:10 PM	2.83	13	960	0.54	24	0.46052	0.46052	0.00024	0.00024	0.00876	0.00876

TPHg
0.461 **Benzene**
0.0002 **MTBE**
0.009

TABLE 12
VAPOR EXTRACTION RESULTS
MOBIL STATION 18MLJ
5005 NORTH LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA
ERI 3163

MULTIPLE-WELL AS/SVE TEST DATA & CALCULATIONS:

Sample ID	Date	Time	Operating Hours Over Period	Flow (scfm)	TPHg (ppmv)	Benzene (ppmv)	MTBE (ppmv)	TPHg		Benzene		MTBE	
								Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed	Pounds Removed Per Period	Cumulative Pounds Removed
I-SVE COMB-A	07/07/05	2:30 PM	0.50	82	9800	9.6	81						
I-SVE COMB-B	07/07/05	4:00 PM	1.50	82	7000	13	140	19.80060	19.80060	0.02419	0.02419	0.26653	0.26653

<u>TPHg</u>	<u>Benzene</u>	<u>MTBE</u>
19.801	0.0242	0.267

TOTAL POUNDS REMOVED	28.087	0.0363	0.306
-----------------------------	---------------	---------------	--------------

TPHg = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether analyzed by Environmental Protection Agency Method TO-15M

scfm = standard cubic feet per minute

ppmv = parts per million by volume

psia = pounds per square inch atmospheric

psig = pounds per square inch gauge

Operating hours = hours of system operation between influent vapor sample collection times

° F = degrees Fahrenheit

APPENDIX A

CORRESPONDENCE

3163



California Regional Water Quality Control Board Los Angeles Region



Alan C. Lloyd, Ph.D.
Agency Secretary

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

May 9, 2005

Ms. Marla Guensler
ExxonMobil Refining & Supply
2532 North 4th Street, PMB 343
Flagstaff, AZ 86004

**IMPLEMENTATION OF FINAL DRAFT GUIDELINES FOR INVESTIGATION AND CLEANUP OF MTBE AND OTHER OXYGENATES (B2): 1. DEVELOPMENT OF PRELIMINARY SITE CONCEPTUAL MODEL; 2. INTERIM REMEDIAL ACTION WORKPLAN; 3. SITE CHARACTERIZATION REPORT; 4. FINAL REMEDIAL ACTION PLAN; AND 5. PERIODIC PROGRESS, UPDATE, AND MONITORING REPORTS. MOBIL STATION #18-MLJ
5005 NORTH LONG BEACH BOULEVARD, LONG BEACH (FILE NO. 908050452A)**

Dear Ms. Guensler:

BACKGROUND

Methyl tertiary butyl ether (MTBE) has been used as an octane booster in the United States since the late 1970's and added to gasoline to comply with Clean Air Act mandates since 1979. The use of MTBE increased dramatically in the early 1990's as a result of Clean Air Act Amendment requirements for reformulated gasoline. Although MTBE in gasoline helps lessen air pollution, it has become a significant contaminant in groundwater. Relative to other fuel hydrocarbons, MTBE has a high solubility in water, a low retardation rate in groundwater aquifers, and is slow to biodegrade. These properties, combined with its high percentage in gasoline (11% to 15%), cause the potential for high source area concentrations, long plumes in groundwater, and long residence times in the subsurface environment. MTBE also has taste and odor characteristics that can impair water quality at very low concentrations. There have been impacts on drinking water wells at dozens of sites throughout California. Most notably, in the greater Los Angeles area, within the Charnock Sub-Basin, a primary local source of drinking water for the City of Santa Monica and the Southern California Water Company.

Governor Davis issued Executive Order D-5-99 on March 25, 1999, and signed Senate Bill 989 on October 8, 1999. These documents recognize that if not managed properly, MTBE can cause significant adverse impacts to current and future beneficial uses of ground and surface waters. As a result, Final Draft Guidelines for Investigation and Cleanup of MTBE and Other Oxygenates (Final Draft Guidelines) have been developed by the State Water Resources Control Board, Division of Clean Water Programs-Underground Storage Tank Program. The Final Draft Guidelines (copy attached) are intended to assist managers and staff at state and local regulatory agencies with the

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May 9, 2005

task of overseeing the investigation and cleanup of sites where there have been or may have been releases of MTBE-laden petroleum fuels or other oxygenates [i.e., tertiary butyl alcohol (TBA), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), methanol (MeOH), and ethanol (EtOH)]. The Final Draft Guidelines provide definitions for areas that are most vulnerable to groundwater contamination, provide a priority ranking scheme for oxygenate release sites, outline a decision making framework for determining appropriate actions, and propose a timeframe for completing site management milestones.

The Final Draft Guidelines provide a framework for prioritizing resources to work on sites with MTBE or other fuel oxygenate contamination. A complete description of the seven-step process is contained within the Final Draft Guidelines (Pages 6 through 11). The Los Angeles Regional Water Quality Control Board (LARWQCB) is conservatively interpreting the Final Draft Guidelines, which will result in certain Underground Storage Tank (UST) leak cases being included within higher priorities for investigation and cleanup. During March 2001, the LARWQCB issued directive letters to all sites identified with investigation and cleanup priority of A1 [i.e., all sites less than 1,000 feet to a receptor, sites less than 3,000 feet to a receptor that have failed to provide required test results for MTBE and other fuel oxygenates, selected free product sites, and sites in close proximity to sensitive receptors (e.g., schools)]. In January 2002, the LARWQCB issued directive letters to all sites identified with investigation and cleanup priority of B1 [i.e., all sites greater than 1,000 feet and less than 3,000 feet from a receptor, selected free product sites, sites in close proximity to sensitive receptors, and/or sites containing high concentrations of oxygenates]. Now, we have reviewed the information contained in the case file for this site and have assigned an initial investigation and cleanup priority of B2 to this site [i.e., all sites greater than 1,000 feet and less than 3,000 feet from a receptor, with or without MTBE/oxygenates detection].

IMPLEMENTATION OF FINAL DRAFT GUIDELINES

Step 1: Initial Investigation/Scoping

In accordance with Step 1 (Initial Investigation/Scoping), we have reviewed the information contained in the UST case file for the site, including the most recent technical report entitled "Quarterly Report for the First Quarter 2005" dated April 15, 2005, prepared by Environmental Resolutions, Inc. Based upon our review and evaluation, we find that groundwater beneath the subject site is impacted by petroleum hydrocarbons and/or the gasoline additive MTBE released from UST systems. The site is located within an area determined to be vulnerable to groundwater contamination, as defined in the Final Draft Guidelines. The site overlies an aquifer used as a community water supply and the distance to the closest municipal or domestic supply well (No. 04S13W12E01S) is approximately 2,734 feet from the site. Based upon this information we have assigned an Initial Investigation Priority Class B2 to the site. You

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have been identified as the responsible party for the site and, as such, are directed to perform the following corrective action steps:

1. Develop a Preliminary Site Conceptual Model;
2. Develop a technical report detailing the results of all soil and groundwater assessment completed and submit a workplan to complete any remaining soil and/or groundwater investigations necessary to fully define the lateral and vertical extent of any free product or dissolved petroleum hydrocarbon plume(s), to include MTBE or other fuel oxygenate contamination onsite and offsite;
3. Develop a technical report detailing the results of any corrective actions completed and submit a workplan to perform any interim cleanup necessary to contain or control the spread or migration of any residual contamination;
4. Complete an evaluation to estimate plume travel time;
5. Determine a final cleanup remedy;
6. Perform quarterly groundwater monitoring and provide updates to the Site Conceptual Model; and
7. Perform a verification-monitoring program.

All steps are to be developed and performed on an expedited schedule to reduce any adverse impacts to water quality resulting from UST system leaks that have resulted at the site.

Step 2: Develop Preliminary Site Conceptual Model/Assign Investigation Priority Classification

Develop a Preliminary Site Conceptual Model (PSCM) Report consistent with the Final Draft Guidelines-Appendix C (Page 15). As stated above, we have already assigned an Initial Investigation Priority Class B to the site. Under this Initial Investigation Priority and for the purpose of developing the PSCM, the travel time to the nearest production well/receptor is conservatively estimated to be greater than one year and less than 3 years. The technical report (Preliminary Site Conceptual Model) containing the results of this evaluation shall be submitted to this Regional Board by **July 15, 2005**.

The PSCM must incorporate, at a minimum; all the components listed under Appendix C of the "Final Draft Guidelines for Investigation and Cleanup of MTBE and Other Oxygenates" dated March 27, 2000. The PSCM should provide a detailed written and graphical representation of the release scenario, site characteristics (geology, hydrogeology, isoconcentration contour maps for TPH, benzene and MTBE etc.) and the likely distribution of chemicals at the site. It should also identify all pathways for impact to potential receptors from potential sources through transport of chemicals in air, soil and water. The information contained within the PSCM for site assessment activities is critical in making determinations on the extent of assessment completed and whether any additional hydrogeologic assessment work is necessary at the site.

If the Site Characterization Report indicates that additional soil borings or groundwater monitoring wells are needed to fully define the extent of soil and/or groundwater contamination, then a workplan to complete any remaining assessment must be incorporated into your revised PSCM. The same type of evaluation is required for any cleanup action taken to date or needed to implement a final cleanup plan at the site. Technical reports previously submitted to the Regional Board detailing the results of any soil and/or groundwater assessment, periodic monitoring, or cleanup do not have to be resubmitted. However, you need to repackage the information, so that the PSCM is a complete stand-alone document. Periodic updates to the PSCM are required on a quarterly basis as required in Step 5 below and as defined in Step 5 of the Final Draft Guidelines.

Step 3: Interim Remedial Action

The March 21, 2005, sampling indicated the maximum concentrations of TPHg, benzene, methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA) in groundwater samples were 3,960, 80.7, 1,370, and 49,700 µg/L, respectively. In addition, the previous investigation reports indicated that high concentrations of petroleum hydrocarbon (up to 53 mg/kg of TPHg, 11 mg/kg of benzene), and MTBE (up to 50 mg/kg) were detected in the soil. Therefore, the "Interim Remedial Action Plan" dated May 4, 2005, proposed to perform air sparging (AS) and soil vapor extraction (SVE) feasibility study to determine the most viable remedial approach to remediate hydrocarbons in soil and groundwater. The proposed test will consist of a mobile treatment system equipped with a thermal/catalytic oxidizer and a liquid-ring pump using the proposed AS/SVE1 wells. Additional three AS/SVE wells will be installed and used as observation wells. We concur with your proposal, provided all work is completed as proposed and the following conditions are met:

1. You are required to include a Final Remedial Action Plan detailing the results of the feasibility test and proposed remedial action based on the test data in SCM due by **July 15, 2005**. This proposal must contain a scaled site-plan map with construction diagram for the proposed AS/SVE and groundwater extraction wells and cross section profiles depicting these wells, contaminant concentration plume, and lithological information. The FRAP must also include final remedial system design, realistic cost for operation and maintenance, and a timeline for implementation and completion. Additional alternative cleanup methodologies must be address to this issue if applicable.
2. All necessary permits must be obtained from the appropriate agencies prior to the start of work.
3. All reports must conform to the "Guidelines for Report Submittals" published by the Los Angeles County Department of Public Works.

4. All work must be performed by or under the direction of a registered geologist, certified engineering geologist, or registered civil engineer. A statement is required in the report that the registered professional in direct responsible charge actually supervised or personally conducted all the work associated with the project. All technical submittals must contain a wet ink signature and seal by one of the registered professionals.
5. Notify the regional Board at least seven days prior to commencing the field work so that our staff may be present.

Step 4: Site Characterization/Determine Plume Travel Time

Develop a comprehensive Site Characterization (SC) Report detailing the results of all soil and groundwater assessments completed at the site. At a minimum, the report should include:

1. Site maps depicting the locations of all soil samples, soil test borings, groundwater monitoring wells, vapor extraction, or air sparging wells;
2. A detailed location map of the area surrounding the site to include streets, property locations and land uses (i.e., residential, commercial or industrial with site name, etc.) 250 feet upgradient, 250 feet lateral to the direction of groundwater flow, and a minimum of 500 feet downgradient of any identified contamination plume(s);
3. Soil boring logs and well drilling logs from prior work;
4. Develop scaled lithologic cross sections for the site based upon the existing soil and groundwater data/information. A minimum of three cross sections shall be developed from soil sampling programs and from the installation of groundwater monitoring wells and/or vapor wells. Cross sections shall provide the lithologic column with Unified Soil Classification System abbreviations and symbols;
5. Scaled groundwater contour maps depicting the direction of groundwater flow and gradient across the subject site. If the groundwater flow direction fluctuates over time, then historical groundwater contour maps reflecting these changes shall be provided;
6. Groundwater contaminant plume maps for TPH_G, TPH_D, BTEX, MTBE, and for all fuel oxygenates detected shall be illustrated in plan view and contain constituent concentrations;
7. A tabular summary showing: monitoring well identification number, monitoring well screened and blank intervals, completion depths, survey elevations, survey reference point, slot size(s), annular seal interval, water elevation ranges, and free product thickness, if any; and
8. A tabular data summary showing all historical soil and groundwater chemical and physical data to date.

The technical report (Site Characterization Report) detailing the results of all soil and groundwater assessments completed together with a workplan to conduct any supplemental hydrogeologic assessment needed to fully define the extent of any



remaining free product and/or dissolved petroleum hydrocarbons, including oxygenates, to non-detect levels, shall be submitted to this Regional Board by **July 15, 2005**.

Determine Plume Travel Time

Acceptable methods that can be used to estimate plume travel time to reach a receptor should include the application of mainstream or industry-recognized fate and transport analytical models (e.g., Domenico Analytical Solution, 1987; Finite-Mass Advection/Dispersion Analytical Model by Fried, 1975; Freeze and Cherry 1975; and Bear 1972). Alternatively, advection/dispersion analytical models in Excel format developed by Regional Board staff may also be used (applicable to cases with a one-time release or continuous source release) and are available on our website (<http://www.swrcb.ca.gov/rwqcb4> under LARWQCB Programs – UST - Models). Extensive or detailed modeling effort is not required nor is that the objective of this phase of the investigation. However, the analytical model used should be calibrated with available site-specific data, using conservative assumptions for mass released, source area, source concentration, groundwater velocity, groundwater direction (constant), dispersivities, decay rate, etc. Available site-specific data on geology or hydrogeology may be quite useful in this regard. For example, groundwater site characterization evaluation, type of soil and aquifer materials, and uninterrupted vertical profile of site stratigraphy may be used together to make conservative estimates of groundwater velocity. A technical report (as an integral part of the Site Conceptual Model Report) on this phase of the investigation shall, at a minimum include:

1. Detailed documentation of the analytical model used, including its limitations, conditions, and assumptions;
2. Detailed descriptions and layouts of the process used to arrive at the model conclusions and justification for the model assumptions applied, including literature sources;
3. Detailed and extensive discussions on model conclusions;
4. Recommendations on any additional site work that can reduce model uncertainties and further refine the Site Conceptual Model;
5. Any site- or region-specific data applied during the modeling process, including hydrogeologic data and historical soil and groundwater analytical data to date (if applicable); and
6. Any information on atypical site-specific conditions that may cause solutions to the analytical model to be unrealistic or less-conservative, such as:
 - a. Whether the site is near an area with aggressive pumping (characteristic of municipal or drinking water wells) which can alter the natural flow of water and thus affect the direction of groundwater flow and velocity;

- b. The presence of heterogeneous aquifer materials that may cause contaminants to travel at greater velocities than the flow pathway applied for the analytical model (e.g. the existence of fractured rock and limestone caverns);
- c. The existence of conduits and geologic faults, and
- d. Multiple or continuous releases; and releases from different locations, that can create multiple sources or cause increases in contaminant source concentrations.

The technical report containing an evaluation to estimate Plume Travel Time, in accordance with the guidance provided above, shall be submitted to this Regional Board by **October 15, 2005**.

Step 5: Update Site Conceptual Model/Assign Cleanup Priority Classification

Update Site Conceptual Model

This step provides for the update to the PSCM on a periodic basis, to incorporate any new and/or updated information or data (i.e., results of any additional assessment and/or any remedial activities completed during the reporting period, a complete discussion of current site conditions, a complete discussion and trend analysis on analytical groundwater data, and provide a technical Workplan for additional assessment and/or cleanup as determined by a review and evaluation of historical and current data, etc.). Quarterly technical reports shall be submitted to update the PSCM developed as part of Step 2. The SCM validation process shall be initiated starting with the quarter after the PSCM is established. The first update to the PSCM is due to this Regional Board by **October 15, 2005**, for the July through September 2003 quarter. The Site Conceptual Model Update is a stand-alone document that provides a complete update to the PSCM. The Site Conceptual Model Update must contain all the components that are currently required in the Quarterly Groundwater Monitoring Reports, therefore, a separate Quarterly Groundwater Monitoring Report is not required.

Step 6: Corrective Action/Remediation

The need for performing active cleanup may vary based upon many factors (e.g., release history, mass released into the environment, hot spot areas, site specific and regional geology, and interim cleanup actions implemented, etc.). As stated above in Step 3, a technical report containing the results of the IRA evaluation (pilot test) together with a Final RAP, together with a time schedule for implementation shall be developed and submitted to this Regional Board by **July 15, 2005**.

Step 7: Verification Monitoring

Verification monitoring is an integral part of performing interim and final cleanup remedies at UST release sites. These monitoring programs will be necessary in order to determine whether any interim and/or final RAP implemented has achieved its intended purpose and will be required for all sites to determine the effectiveness of remedial actions implemented. The nature and scope of the verification-monitoring program shall be determined subsequent to completing full implementation of the RAP and shall be approved by this Regional Board prior to implementation.

LANDOWNER OR IMPACTED SITE NOTIFICATION REQUIREMENTS

Additionally, pursuant to recent changes of the California Health and Safety Code (section 25299.37.2) and Division 7 of the Porter Cologne Water Quality Control Act under Assembly Bill 681, this Regional Board is required to notify all current fee title holders of record for the site or sites impacted by releases from underground storage tanks prior to considering corrective action and cleanup or case closure.

If site assessment and/or monitoring data provided for corrective action work ongoing at the site indicate that release(s) from the underground storage tank systems have impacted offsite property(ies), then please provide the name, mailing address, and phone number for all record fee title holders for the site and any offsite property(ies) impacted by releases from the subject site, together with a copy of the county record of current ownership (grant deed or deed of trust), available from the County Recorder's Office, for each property affected, or by completing this Regional Board's "Certification Declaration for Compliance with Fee Title Holder Notification Requirements," (copy attached) for each site. **If this information has been provided in the past, then you need not provide it again.** Copies of all technical reports required above together with any periodic updates are to be sent directly to the property owner of the site and to any other property owner(s) impacted by UST releases from the site. The cover letter transmitting your technical reports to this Regional Board shall state that the technical reports were sent directly to all property owner(s) of the site as well as any offsite property owner impacted by the UST release(s). The cover letter shall provide a list of all property owners sent technical reports and the date the technical reports were sent.



**NEW REGULATORY REQUIREMENT FOR ELECTRONIC SUBMISSION OF
LABORATORY DATA TO THE STATE GEOTRACKER INTERNET DATABASE**

On June 28, 2001, the State Water Resources Control Board-Underground Storage Tank Program manager, Mrs. Liz Haven, sent you a letter informing you of the new requirements for submission of electronic laboratory data for Underground Storage Tank Program reports. These requirements are contained in emergency regulations (CCR Title 23, Chapter 16, Article 12, Sections 2729 and 2729.1) recently adopted by the State Water Resources Control Board (Board), and became effective September 1, 2001. The Board adopted these regulations to implement Assembly Bill 2886 (Chapter 727, Statutes of 2000, "AB 2886"). The regulations and other background information are available on the Internet by going to <http://geotracker.swrcb.ca.gov> and clicking on "AB 2886". The emergency regulations (Water Code Sections 13195-13198) require persons to ensure electronic submission of laboratory data (i.e. soil or water chemical analysis) and locational data (i.e. location and elevation of groundwater monitoring wells), via the Internet to the SWRCB's GeoTracker database.

In accordance with the above regulations, you are required to submit all future laboratory data over the Internet in the Electronic Deliverable Format to the SWRCB's GeoTracker database for any soil and/or groundwater samples obtained after September 1, 2001. This would include any sampling completed for underground storage tank system removal, site assessment activities, periodic groundwater monitoring, and post cleanup verification sampling. In accordance with the above regulations, you are also required to submit locational data for all groundwater monitoring wells (i.e., latitude, longitude, and elevation survey data) together with groundwater information (i.e., elevation, depth to free product, monitoring well status, etc.) and a site map commencing January 1, 2002. Hard copy paper reports are still required.

REPORTING REQUIREMENTS

The Final Draft Guidelines, Appendix B (Technical References) contains a partial listing of documents related to site investigation and remediation that can be used for development of workplans required by this Regional Board. The technical reports shall be submitted to this Regional Board according to the schedule contained in Table 1- Technical Report Type and Due Dates listed below. The technical reports for items: 1-[Preliminary Site Conceptual Model (PSCM) Report]; 2-[Interim Remedial Action (IRA) Report and Workplan]; and 3-[Site Characterization (SC) Report and Workplan] identified in Table 1 below must be submitted as a single stand alone technical report. **Pursuant to section 13267(b) of the California Water Code, failure to submit the required technical report acceptable to the Executive Officer, by the due dates specified, may result in the imposition of civil liability penalties by this Regional Board of up to \$1,000.00 per day for each day each technical report is not received pursuant to**

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Ms. Marla Guensler
Mobil Station #18-MLJ

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section 13268 of the California Water Code. This Regional Board can assess these civil liability penalties at any time after the due dates specified below and without further warning.

Table 1-Technical Report Type and Due Dates

Technical Report Type ^{1,2,3,4}	Due Dates
1. Preliminary Site Conceptual Model (PSCM) Report (Step 2-Final Draft Guidelines)	July 15, 2005
2. Interim Remedial Action (IRA) Report and Workplan (Step 3-Final Draft Guidelines)	July 15, 2005
3. Site Characterization (SC) Report and Workplan (Step 4-Final Draft Guidelines)	July 15, 2005
4. Estimate of Plume Travel Time (Step 4-Final Draft Guidelines)	October 15, 2005 (Yearly thereafter by October 15)
5. Update Site Conceptual Model (SCM) Reports (Step 5-Final Draft Guidelines)	October 15, 2003 (Quarterly thereafter by the following dates: January 15, April 15, July 15, and October 15)
6. Final Remedial Action Plan (RAP) (Step 6-Final Draft Guidelines)	July 15, 2004
7. Quarterly Monitoring and Progress Reports ⁵	October 15, 2005 (Quarterly thereafter by the following dates: January 15, April 15, July 15, and October 15)

¹-At a minimum, all workplans and final reports shall conform to the Guidelines for Report Submittals published by the Los Angeles County Department of Public Works and the California Underground Storage Tank Regulations.

²-All workplans are to contain an appropriate Health and Safety Plan commensurate with the level of work to be completed.

³-All analytical testing and sampling shall conform to the Leaking Underground Storage Tanks Program-Update Laboratory Testing Requirements, dated June 22, 2000.

⁴-All technical reports shall be prepared by or under the direction of a registered geologist, certified engineering geologist, or registered civil engineer with appropriate experience.

⁵-Quarterly Groundwater Monitoring and Progress Reports are to be included as part of the Site Conceptual Model Updates.

If you have any questions or need additional information, please call Mr. Noman Chowdhury at (213) 576-6704, or Mr. Gregg Kwey at (213) 576-6702.

Sincerely,

ORIGINAL SIGNED BY

Jonathan S. Bishop
Executive Officer

California Environmental Protection Agency



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Ms. Marla Guensler
Mobil Station #18-MLJ

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Enclosures:

1. Final Draft Guidelines for Investigation and Cleanup of MTBE and Other Oxygenates (March 27, 2000)
2. Guidelines for Report Submittals published by the Los Angeles County Department of Public Works (June 1993)
3. Leaking Underground Storage Tanks Program-Update Laboratory Testing Requirements (June 22, 2000)
4. Leaking Underground Storage Tank Program Certification Declaration for Compliance with Fee Title Holder Notification Requirements

Cc: Ms. Yvonne Shanks, SWRCB, Underground Storage Tank Cleanup Fund
Ms. Nancy Mastumoto, Water Replenishment District of Southern California
Ms. Carmen Piro, Long Beach Department of Health and Human Services
Mr. George Salley, Environmental Resolutions, Inc.

California Environmental Protection Agency



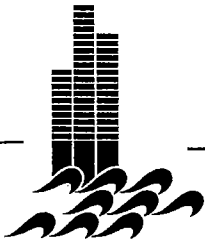
Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

APPENDIX B

WELL PERMIT

RECEIVED JUN 03 2005



CITY OF LONG BEACH

DEPARTMENT OF HEALTH & HUMAN SERVICES

2525 Grand Avenue Long Beach, CA 90815-1765 (562) 570-4134 FAX (562) 570-4038

WELL PERMIT

Permit # 1109

Date: June 1, 2005

All work must be completed in accordance with Water Well Bulletin 74-81 and 74-90

Site Address: 5005 N LONG BEACH BLVD
Owner: Exxon Mobil Oil Corporation
Owner Address: 5005 N Long Beach Blvd, Long Beach
Consulting Firm: ERI
Consulting Firm Address: 20372 N Sea Circle, Lake Forest, CA 92630
Drilling Company: J & H Drilling
Drilling Company Address: 1014 E South St, Anaheim, CA
Method of Construction/Destruction: see attached

Vapor Extraction

This permit valid for one year from date above

Steven Nakauchi, REHS IV
Cross-Connection/Water Program

RECEIVED JUN 03 2005

1109



CITY OF LONG BEACH

DEPARTMENT OF HEALTH & HUMAN SERVICES

2525 Grand Avenue Long Beach, CA 90815-1765 (562) 570-4134 FAX (562) 570-4038

APPLICATION FOR WELL PERMIT

Date: 5-23-05

Type of Permit: (check)

- ☒ New Well Construction
☐ Destruction

Type of Well: (check)

- ☐ Monitoring ☐ Irrigation
☐ Cathodic ☐ Soil Boring
☐ Private Domestic ☒ Vapor Extraction
☐ Public Domestic ☐ Other

Well Owner Name: ExxonMobil Oil Corporation

Address: 5005 N. Long Beach Blvd.

City: Long Beach

Phone: 562-422-2086

Site

Address 5005 N. Long Beach Boulevard

Site Map ☒ Site plan attached

Consulting Firm: ERI

Address: 20372 N. Sea Circle

City: Lake Forest 92630

Phone: 949-457-8954

Drilling Company: J & H Drilling

Address: 1014 E. South St.

City: Anaheim

Phone: 714-535-0392

Proposed Start Date:

5-31-05

Construction/Destruction Method

Type of casing, method of sealing, etc.
(Use additional sheet or attachments)

See Attached Well
Construction Diagram

To be done in accordance with Water Well Bulletin 74-81 & 74-90

I hereby agree to comply in every respect with all regulations of the Long Beach Department of Health and Human Services and with all ordinances and laws of the City of Long Beach and of the State of California pertaining to well construction, reconstruction and destruction. Upon completion of well and within ten days thereafter, I will furnish the Long Beach Department of Health and Human Services with a complete log of the well, giving date drilled, depth of well, all perforations in casing, and any other data deemed necessary by other City agencies.

Applicants Signature: George Solley

Print Name: George Solley

Disposition of Application: (For Office Use Only)

☒ Approved with Conditions

☐ Denied

Date: 6/1/05

If denied or approved with conditions, report reason or conditions here:

Approved By [Signature]

APPENDIX C

BORING LOGS

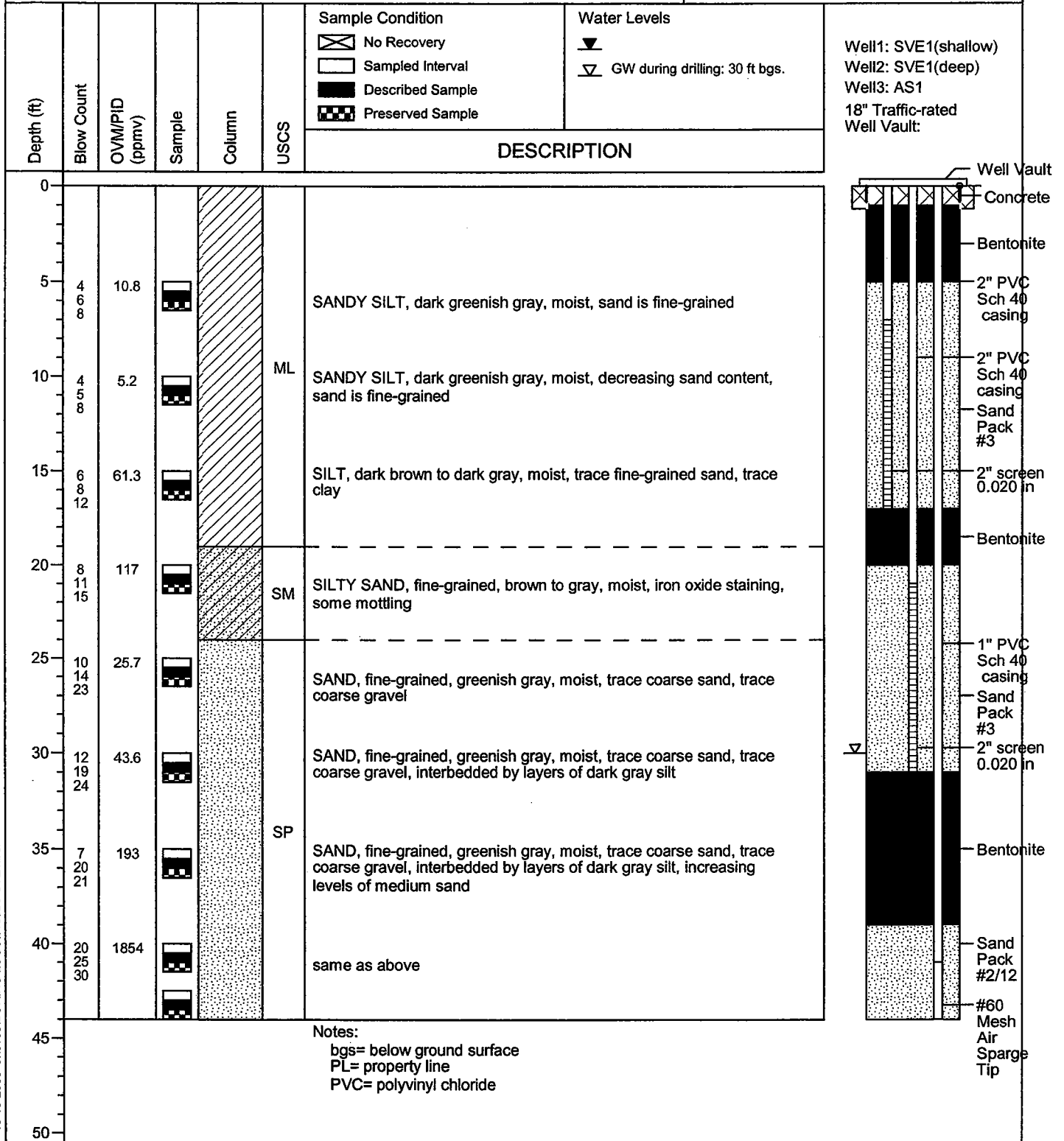


BORING LOG B8-AS/SVE1

(Page 1 of 1)

Date Drilled: 6/1/05
 Drilling Co.: J & H Drilling
 Drilling Method: Hollow Stem Auger
 Sampling Method: 2" by 18" split spoon
 Borehole Diameter: 10"
 Casing Diameter: 2 1/2" / 1" schedule 40 PVC
 Location N-S: 28' North of South PL
 Location E-W: 19' East of West PL
 Total Depth: 44' bgs
 First GW Depth: 30' bgs

Project No.: 3163
 Site: Mobil Station 18MLJ, 5005 North Long Beach Boulevard
 Logged By: Russel Pace
 Reviewed By: George E. Salley, P.G. 6308
 Signature: *George E. Salley*





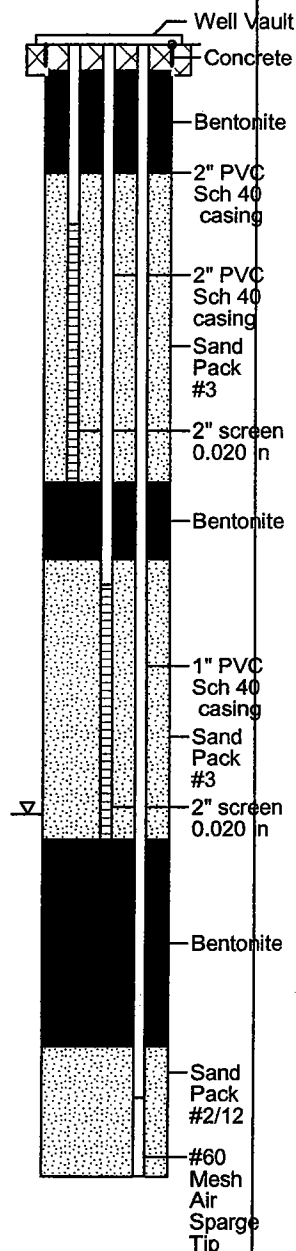
BORING LOG B9-AS/SVE2

(Page 1 of 1)

Date Drilled: 6/1/05
 Drilling Co.: J & H Drilling
 Drilling Method: Hollow Stem Auger
 Sampling Method: 2" by 18" split spoon
 Borehole Diameter: 10"
 Casing Diameter: 2 1/2" schedule 40 PVC
 Location N-S: 28' North of South PL
 Location E-W: 35' East of West PL
 Total Depth: 44' bgs
 First GW Depth: 30' bgs

Project No.: 3163
 Site: Mobil Station 18MLJ, 5005 North Long Beach Boulevard
 Logged By: Russel Pace
 Reviewed By: George E. Salley, P.G. 6308
 Signature: *George E. Salley*

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	Sample Condition	DESCRIPTION
						No Recovery Sampled Interval Described Sample Preserved Sample	
						Water Levels GW during drilling: 30 ft bgs.	
0							
5	5 6 14	171					SANDY SILT, dark brown, moist, sand is fine-grained
10	8 9 10	236			ML		SILT, dark gray, moist, some fine-grained sand, trace clay
15	6 7 10	445					SILT, dark brown to gray, moist, some fine-grained sand, trace clay
20	8 12 19	2953			SM		SILTY SAND, fine-grained, brown to gray, moist, iron oxide staining, some mottling
25	13 19 24	1251					SAND, fine-grained, dark greenish gray, moist, trace silt, interbedded by layers of dark gray silt
30	14 19 21	2414					SAND, fine-grained, dark greenish gray, wet, trace silt, interbedded by layers of dark gray silt transitioning to a silty sand
35	9 16 17	NA			SP		SAND, fine-grained, ash gray, wet, poorly graded
40	24 50(5")	1812					SAND, fine-grained, ash gray, wet, poorly graded with interbedded layers of brown silt
45							Notes: bgs= below ground surface PL= property line PVC= polyvinyl chloride
50							





BORING LOG B10-AS/SVE3

(Page 1 of 1)

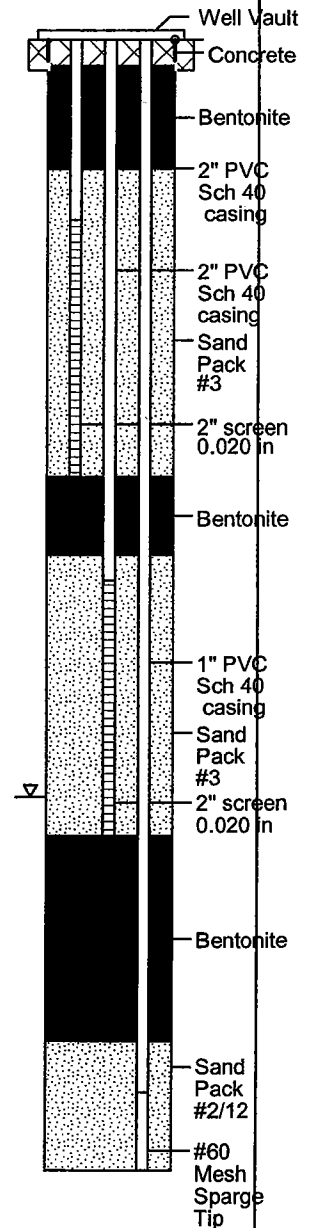
Date Drilled: : 6/1/05
 Drilling Co.: : J & H Drilling
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 2" by 18" split spoon
 Borehole Diameter: : 10"
 Casing Diameter: : 2 1/2" / 1" schedule 40 PVC
 Location N-S : 4' North of South PL
 Location E-W : 19' East of West PL
 Total Depth: : 44' bgs
 First GW Depth: : 30' bgs

Project No.: : 3163
 Site: : Mobil Station 18MLJ, 5005 North Long Beach Boulevard
 Logged By: : Russel Pace
 Reviewed By: : George E. Salley, P.G. 6308
 Signature: : *George E. Salley*

Depth (ft)	Blow Count	OVM/PIID (ppmv)	Sample	Column	USCS	Sample Condition	DESCRIPTION	Water Levels
						<input checked="" type="checkbox"/> No Recovery <input type="checkbox"/> Sampled Interval <input checked="" type="checkbox"/> Described Sample <input checked="" type="checkbox"/> Preserved Sample		
0								
5	4 8 11	0.9	<input checked="" type="checkbox"/>				SANDY SILT, brown to gray, moist, sand is fine-grained	
10	7 18 21	2.3	<input checked="" type="checkbox"/>		ML		SANDY SILT, brown to gray, moist, decreasing sand content, sand is fine-grained	
15	10 12 15	13.11	<input checked="" type="checkbox"/>				SILT, dark brown to dark gray, moist, trace fine-grained sand, trace clay	
20	14 17 20	6.4	<input checked="" type="checkbox"/>		SM		SILTY SAND, fine-grained, brown to gray, moist, iron oxide staining, some mottling	
25	17 28 32	43	<input checked="" type="checkbox"/>				SAND, fine-grained, greenish gray, moist, trace coarse sand, trace coarse gravel	
30	12 10 23	29.2	<input checked="" type="checkbox"/>				SAND, fine-grained, greenish gray, moist, trace coarse sand, trace coarse gravel, interbedded by layers of dark gray silt	
35	32 50 40(6)	2.8	<input checked="" type="checkbox"/>		SP		SAND, fine-grained, greenish gray, moist, trace coarse sand, trace coarse gravel, interbedded by layers of dark gray silt, increasing levels of medium sand	
40	16 19 28	19.5	<input checked="" type="checkbox"/>				same as above	
45								
50								

Notes:
 bgs= below ground surface
 PL= property line
 PVC= polyvinyl chloride

Well1: SVE3(shallow)
 Well2: SVE3(deep)
 Well3: AS3
 18" Traffic-rated
 Well Vault:



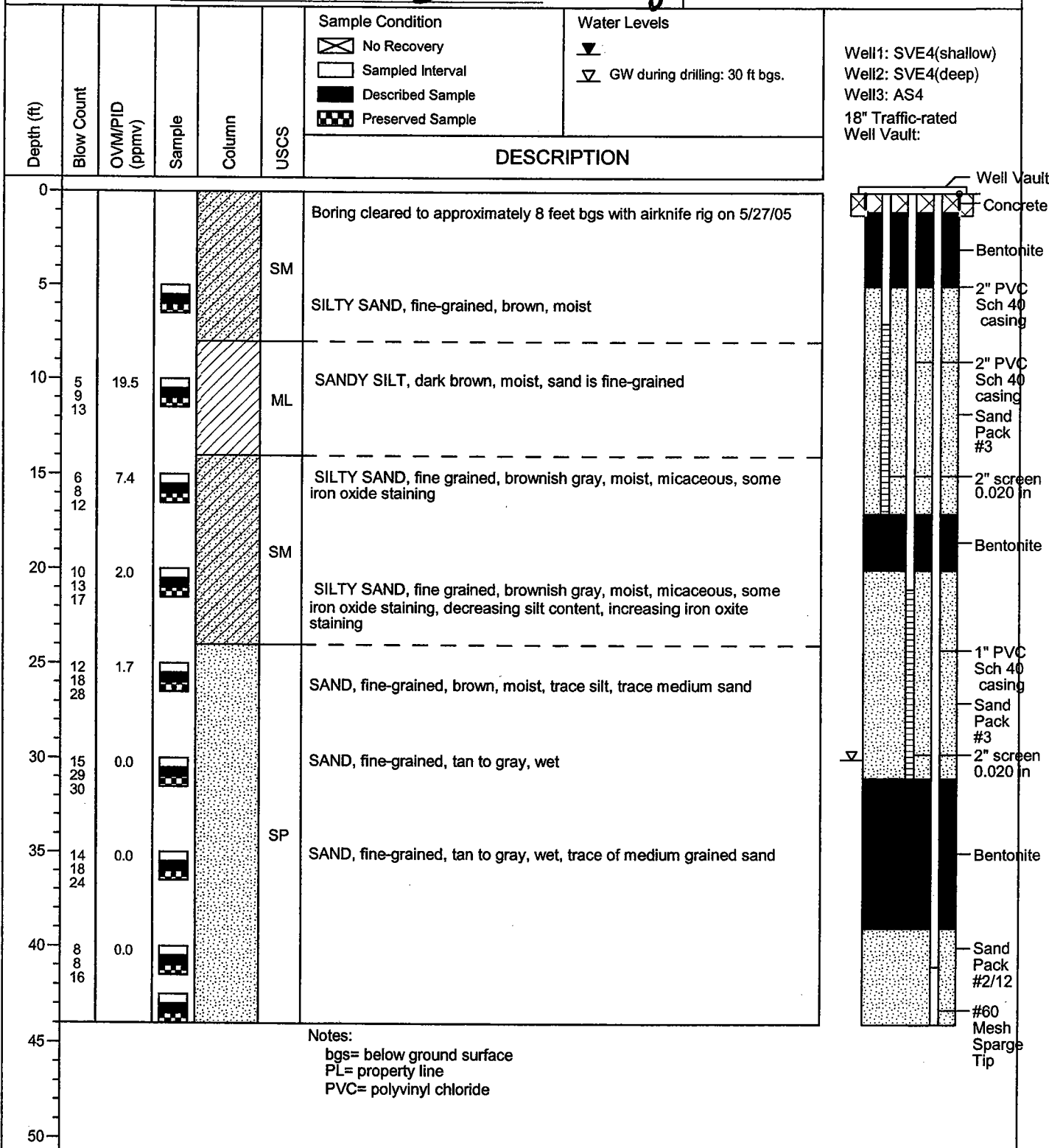


BORING LOG B11-AS/SVE4

(Page 1 of 1)

Date Drilled: : 6/1/05
 Drilling Co.: : J & H Drilling
 Drilling Method: : Hollow Stem Auger
 Sampling Method: : 2" by 18" split spoon
 Borehole Diameter: : 10"
 Casing Diameter: : 2 1/2" / 1" schedule 40 PVC
 Location N-S : 74' North of South PL
 Location E-W : 70' East of West PL
 Total Depth: : 44' bgs
 First GW Depth: : 30' bgs

Project No.: : 3163
 Site: : Mobil Station 18MLJ, 5005 North Long Beach Boulevard
 Logged By: : Russel Pace
 Reviewed By: : George E. Salley, P.G. 6308
 Signature: : *George E. Salley*



APPENDIX D

NON-HAZARDOUS WASTE MANIFESTS

NO. 650450

NON-HAZARDOUS WASTE DATA FORM

SITE: _____ EPA I.D. NO. _____
 NAME Western Area Retail Remediation Administrator MOBIL 18-MJ
Exxon Mobil Corporation Global Remediation - Retail Projects
 ADDRESS 3700 W. 190th ST., TPT #2-15 5005 N. LONG BEACH BLVD. 12620

CITY, STATE, ZIP Torrance, CA 90504 LONG BEACH, CA PHONE NO. ()

CONTAINERS: No. 3 VOLUME 165 gallons WEIGHT _____

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCK ☒ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION NON-HAZARDOUS WATER GENERATING PROCESS PURGED GROUNDWATER and/or DECON RINSE
 COMPONENTS OF WASTE PPM % COMPONENTS OF WASTE PPM %

1. WATER 99-100% 5. _____

2. TPH < 1% 6. _____

3. _____ 7. BESI# 114190.02

4. _____ 8. _____

PROPERTIES: 7.10 ☐ SOLID ☐ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Moothart BESI on behalf of Exxon Mobil
 TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

NAME BESI EPA I.D. NO. _____

ADDRESS 25971 TOWNE CENTRE DRIVE SERVICE ORDER NO. _____

CITY, STATE, ZIP LAKE FOREST, CA 92610 PICK UP DATE _____

PHONE NO. 949-460-5200 6/24/05

TRUCK, UNIT, I.D. NO. 403683413189 TYPED OR PRINTED FULL NAME & SIGNATURE Tracy P. ... DATE 6/24/05

NAME CROSBY AND OVERTON EPA I.D. NO. _____

ADDRESS 1630 W. 17th STREET DISPOSAL METHOD ☐ LANDFILL ☒ OTHER 15

CITY, STATE, ZIP LONG BEACH, CA 90813

PHONE NO. 562-432-5445

Del ...
 TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/Q		RT/CD	HWDF	NONE

DISCREPANCY

Manifest

TPS Technologies Soil Recycling

Non-Hazardous Soils

Manifest #

Date of Shipment: 6/27/2005 Responsible for Payment: EXXON Transporter Truck #: 418 738 Facility #: 407 Given by TPS: 228102 Load #: 008

Generator's Name and Billing Address:

Western Area Retail Remediation Administrator
Exxon Mobil Corporation
Global Remediation - Retail Projects
3700 W 190th St., TPT #2-15
Torrance, CA 90504

Generator's Phone #:

Generator's US EPA ID No.

Person to Contact:

FAX#:

Customer Account Number with TPS:

Consultant's Name and Billing Address:

ERI

Consultant's Phone #:

Person to Contact:

FAX#:

Customer Account Number with TPS:

Generation Site (Transport from): (name & address)

MOBIL #18-MU
5005 N. LONG BEACH BLVD.
LONG BEACH, CA

Site Phone #:

BTEX
Levels

Person to Contact:

TPH
Levels

FAX#:

AVG.
Levels

Designated Facility (Transport to): (name & address)

TPS TECHNOLOGIES, INC.
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #:

800-862-8001

Person to Contact:

DELLENA JEFFREY

FAX#:

760-246-8004

Facility Permit Numbers

Transporter Name and Mailing Address:

B.E.B.I.
25971 TOWNE CENTRE DRIVE
LAKE FOREST, CA 92610

Transporter's Phone #:

849-460-5200

Person to Contact:

Larry Moothart

FAX#:

849-460-5210

Transporter's US EPA ID No.:

CA0983384521

Transporter's DOT No.:

450647

Customer Account Number with TPS:

1000193

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/>	0 - 10% <input type="checkbox"/>	Gas <input type="checkbox"/>	23115		97280	13840	13440
Clay <input type="checkbox"/> Other <input type="checkbox"/>	10 - 20% <input type="checkbox"/>	Diesel <input type="checkbox"/>					
	20% - over <input type="checkbox"/>	Other <input type="checkbox"/>					
Sand <input type="checkbox"/> Organic <input type="checkbox"/>	0 - 10% <input type="checkbox"/>	Gas <input type="checkbox"/>					6.72
Clay <input type="checkbox"/> Other <input type="checkbox"/>	10 - 20% <input type="checkbox"/>	Diesel <input type="checkbox"/>					
	20% - over <input type="checkbox"/>	Other <input type="checkbox"/>					

List any exception to items listed above:

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name:

Generator ☐Consultant ☐

Signature and date:

Larry Moothart BEI on behalf of ExxonMobil

Month Day Year

11/22/05

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name:

Ed Ramos (LIST)

Signature and date:

Ed Ramos

Month Day Year

6/27/05

Discrepancies:

FAC# 18-MUJ
ID# 328300

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name:

D. JEFFREY / J. PROVANSOL

Signature and date:

D. Jeffrey

608-5

TRANSPORTER COPY

APPENDIX E

LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY RECORDS

6/15/05

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-MLJ
Project Number: .
Laboratory Project Number: 418324.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Page 1

Sample Identification	Lab Number	Collection Date
S-5-B8	05-A79846	6/ 1/05
S-10-B8	05-A79847	6/ 1/05
S-15-B8	05-A79848	6/ 1/05
S-20-B8	05-A79849	6/ 1/05
S-25-B8	05-A79850	6/ 1/05
S-30-B8	05-A79851	6/ 1/05
S-35-B8	05-A79852	6/ 1/05
S-40-B8	05-A79853	6/ 1/05
S-5-B9	05-A79854	6/ 1/05
S-10-B9	05-A79855	6/ 1/05
S-15-B9	05-A79856	6/ 1/05
S-20-B9	05-A79857	6/ 1/05
S-25-B9	05-A79858	6/ 1/05
S-30-B9	05-A79859	6/ 1/05
S-35-B9	05-A79860	6/ 1/05
S-40-B9	05-A79861	6/ 1/05

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204

800-765-0999 • 615-726-3404 FAX

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Roxanne Connor

Report Date: 6/10/05

Johnny A. Mitchell, Laboratory Director
Michael H. Dunn, M.S., Technical Director
Pamela A. Langford, Senior Project Manager
Eric S. Smith, QA/QC Director

Gail A. Lage, Senior Project Manager
Glenn L. Norton, Technical Services
Kelly S. Comstock, Technical Services
Roxanne L. Connor, Senior Project Manager

Laboratory Certification Number: 01168CA

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79846
Sample ID: S-5-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:00
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.7		ug/kg	2.7	0.9	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**tert-methyl amyl ether	<2.7		ug/Kg	2.7	1.1	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Tertiary butyl alcohol	1070		ug/kg	67.6	15.4	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Benzene	3.5		ug/kg	2.7	1.1	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Ethylbenzene	<2.7		ug/kg	2.7	0.7	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Toluene	1.6	J	ug/kg	2.7	0.7	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Xylenes (Total)	<2.7		ug/kg	2.7	1.8	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Methyl-t-butyl ether	885.		ug/kg	135.	60.8	50.	6/ 8/05	16:17	8260B	J. Yun	9340
Ethanol	<270.		ug/kg	270.	204.	1.	6/ 8/05	5:01	8260B	J. Adams	9337
**Diisopropyl ether	<2.7		ug/kg	2.7	1.1	1.	6/ 8/05	5:01	8260/SA05-77	J. Adams	9337
**TPH-GC											
**TPH (Diesel Range,C13-C22)	670	J	ug/kg	1010	340	1.	6/ 8/05	18:30	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	360	J	ug/kg	1000	310	1.	6/ 9/05	20:23	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	73.2	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79846

Sample ID: S-5-B8

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.6 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	3.70 g	5.0 ml	6/ 1/05	8:00	N. Noman	5035
BTX Prep	5.02 g	5.0 ml	6/ 7/05	12:28	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	88.	56. - 145.
TPH Hi Surr., o-Terphenyl	103.	35. - 135.
VOA Surr, 1,2-DCAd4	95.	72. - 125.
VOA Surr Toluene-d8	101.	80. - 124.
VOA Surr, 4-BFB	96.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79847
Sample ID: S-10-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:03
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Tertiary butyl alcohol	8540		ug/kg	2210	504.	50.	6/ 8/05	16:36	8260B	J. Yun	9340
**Benzene	7.3		ug/kg	1.8	0.7	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Ethylbenzene	1.2	J	ug/kg	1.8	0.4	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Toluene	5.8		ug/kg	1.8	0.4	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Xylenes (Total)	1.6	J	ug/kg	1.8	1.2	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Methyl-t-butyl ether	1.1	J	ug/kg	1.8	0.8	1.	6/ 8/05	5:31	8260B	J. Adams	9337
Ethanol	<177.		ug/kg	177.	134.	1.	6/ 8/05	5:31	8260B	J. Adams	9337
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	6/ 8/05	5:31	8260/SA05-77	J. Adams	9337
**TPH-GC											
**TPH (Diesel Range, C13-C22)	740	J	ug/kg	1000	340	1.	6/ 8/05	18:51	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	11100		ug/kg	1000	310	1.	6/ 9/05	20:51	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	76.9	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A79847

Sample ID: S-10-B8

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.9 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.65 g	5.0 ml	6/ 1/05	8:03	N. Noman	5035
BTX Prep	5.01 g	5.0 ml	6/ 7/05	12:32	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	176. #	56. - 145.
TPH Hi Surr., o-Terphenyl	133.	35. - 135.
VOA Surr, 1,2-DCAd4	99.	72. - 125.
VOA Surr Toluene-d8	98.	80. - 124.
VOA Surr, 4-BFB	97.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79848
Sample ID: S-15-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:05
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**tert-methyl amyl ether	<1.7		ug/Kg	1.7	0.7	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Tertiary butyl alcohol	7900		ug/kg	2090	477.	50.	6/ 8/05	16:56	8260B	J. Yun	9340
**Benzene	1.3	J	ug/kg	1.7	0.7	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Ethylbenzene	0.9	J	ug/kg	1.7	0.4	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Toluene	1.3	J	ug/kg	1.7	0.4	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Xylenes (Total)	1.2	J	ug/kg	1.7	1.1	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Methyl-t-butyl ether	2.0		ug/kg	1.7	0.8	1.	6/ 8/05	6:01	8260B	J. Adams	9337
Ethanol	<167.		ug/kg	167.	126.	1.	6/ 8/05	6:01	8260B	J. Adams	9337
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	6/ 8/05	6:01	8260/SA05-77	J. Adams	9337
**TPH-GC											
**TPH (Diesel Range,C13-C22)	920	J	ug/kg	1000	340	1.	6/ 8/05	19:11	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	700	J	ug/kg	1000	310	1.	6/ 9/05	21:20	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	95.0		%				6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79848

Sample ID: S-15-B8

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.98 g	5.0 ml	6/ 1/05	8:05	N. Noman	5035
BTX Prep	5.00 g	5.0 ml	6/ 7/05	12:36	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	68.	56. - 145.
TPH Hi Surr., o-Terphenyl	110.	35. - 135.
VOA Surr, 1,2-DCAd4	89.	72. - 125.
VOA Surr, Toluene-d8	101.	80. - 124.
VOA Surr, 4-BFB	101.	25. - 185.
VOA Surr, DBFM	84.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79849
Sample ID: S-20-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:07
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.5		ug/kg	1.5	0.5	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**tert-methyl amyl ether	<1.5		ug/Kg	1.5	0.6	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Tertiary butyl alcohol	3140		ug/kg	1910	434.	50.	6/ 8/05	17:16	8260B	J. Yun	9340
**Benzene	1.1	J	ug/kg	1.5	0.6	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Ethylbenzene	53.4		ug/kg	1.5	0.4	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Toluene	<1.5		ug/kg	1.5	0.4	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Xylenes (Total)	1.5		ug/kg	1.5	1.0	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Methyl-t-butyl ether	15.8		ug/kg	1.5	0.7	1.	6/ 8/05	6:31	8260B	J. Adams	9337
Ethanol	<152.		ug/kg	152.	115.	1.	6/ 8/05	6:31	8260B	J. Adams	9337
**Diisopropyl ether	<1.5		ug/kg	1.5	0.6	1.	6/ 8/05	6:31	8260/SA05-77	J. Adams	9337
**TPH-GC											
**TPH (Diesel Range, C13-C22)	620	J	ug/kg	1000	340	1.	6/ 8/05	19:32	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	1890		ug/kg	1000	310	1.	6/ 9/05	21:49	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	87.8	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79849

Sample ID: S-20-B8

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.1 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	6.56 g	5.0 ml	6/ 1/05	8:07	N. Noman	5035
BTX Prep	4.99 g	5.0 ml	6/ 7/05	12:46	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	74.	56. - 145.
TPH Hi Surr., o-Terphenyl	107.	35. - 135.
VOA Surr, 1,2-DCAd4	94.	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	97.	25. - 185.
VOA Surr, DBFM	87.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79850
Sample ID: S-25-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:10
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch

**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	6/ 9/05	0:01	8260B	J. Adams	344
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Tertiary butyl alcohol	545.		ug/kg	44.9	10.2	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Benzene	16.0		ug/kg	1.8	0.7	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Ethylbenzene	15.3		ug/kg	1.8	0.4	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Toluene	3.5		ug/kg	1.8	0.4	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Xylenes (Total)	26.2		ug/kg	1.8	1.2	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Methyl-t-butyl ether	224.		ug/kg	89.8	40.4	50.	6/ 8/05	18:02	8260B	J. Yun	324
Ethanol	<180.		ug/kg	180.	136.	1.	6/ 9/05	0:01	8260B	J. Adams	344
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	6/ 9/05	0:01	8260/SA05-77	J. Adams	344
**TPH-GC											
**TPH (Diesel Range, C13-C22)	780	J	ug/kg	1000	340	1.	6/ 8/05	19:52	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12).	400	J	ug/kg	1000	310	1.	6/ 9/05	22:17	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	85.3		%				6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A79850

Sample ID: S-25-B8

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.9 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.57 g	5.0 ml	6/ 1/05	8:10	N. Noman	5035
BTX Prep	5.03 g	5.0 ml	6/ 7/05	12:49	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	149. #	56. - 145.
TPH Hi Surr., o-Terphenyl	117.	35. - 135.
VOA Surr, 1,2-DCA _{d4}	86.	72. - 125.
VOA Surr Toluene-d ₈	93.	80. - 124.
VOA Surr, 4-BFB	89.	25. - 185.
VOA Surr, DBFM	87.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79851
Sample ID: S-30-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:15
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	6/ 8/05	11:32	8260B	J. Yun	324
**tert-methyl amyl ether	<1.7		ug/Kg	1.7	0.7	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Tertiary butyl alcohol	<43.7		ug/kg	43.7	9.97	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Benzene	1.4	J	ug/kg	1.7	0.7	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Ethylbenzene	271.		ug/kg	87.4	21.9	50.	6/ 8/05	19:02	8260B	J. Adams	465
**Toluene	1.6	J	ug/kg	1.7	0.4	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Xylenes (Total)	45.9		ug/kg	1.7	1.1	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Methyl-t-butyl ether	7.2		ug/kg	1.7	0.8	1.	6/ 8/05	11:32	8260B	J. Yun	324
Ethanol	<175.		ug/kg	175.	132.	1.	6/ 8/05	11:32	8260B	J. Yun	324
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	6/ 8/05	11:32	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range,C13-C22)	640	J	ug/kg	1000	340	1.	6/ 8/05	20:13	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	1210		ug/kg	1000	310	1.	6/ 9/05	22:46	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	79.6	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.
GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A79851

Sample ID: S-30-B8

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.1 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.72 g	5.0 ml	6/ 1/05	8:15	N. Noman	5035
BTX Prep	4.99 g	5.0 ml	6/ 7/05	12:53	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	168. #	56. - 145.
TPH Hi Surr., o-Terphenyl	106.	35. - 135.
VOA Surr, 1,2-DCAd4	82.	72. - 125.
VOA Surr Toluene-d8	92.	80. - 124.
VOA Surr, 4-BFB	90.	25. - 185.
VOA Surr, DBFM	93.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79852
Sample ID: S-35-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:22
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.6		ug/kg	1.6	0.6	1.	6/ 8/05	12:02	8260B	J. Yun	324
**tert-methyl amyl ether	<1.6		ug/Kg	1.6	0.7	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Tertiary butyl alcohol	<40.8		ug/kg	40.8	9.30	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Benzene	<1.6		ug/kg	1.6	0.7	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Ethylbenzene	1.0	J	ug/kg	1.6	0.4	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Toluene	<1.6		ug/kg	1.6	0.4	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Xylenes (Total)	<1.6		ug/kg	1.6	1.1	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Methyl-t-butyl ether	<1.6		ug/kg	1.6	0.7	1.	6/ 8/05	12:02	8260B	J. Yun	324
Ethanol	<163.		ug/kg	163.	123.	1.	6/ 8/05	12:02	8260B	J. Yun	324
**Diisopropyl ether	<1.6		ug/kg	1.6	0.7	1.	6/ 8/05	12:02	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range,C13-C22)	560	J	ug/kg	1000	340	1.	6/ 8/05	20:34	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	<1000		ug/kg	1000	310	1.	6/ 9/05	23:15	CA-LUFT	H. Wagner	3761

**Miscellaneous Parameters

% Dry Weight	86.2	%					6/ 9/05	8:39	CLP	A. Runnels	4885
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Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79852

Sample ID: S-35-B8

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.1 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	6.13 g	5.0 ml	6/ 1/05	8:22	N. Noman	5035
BTX Prep	4.98 g	5.0 ml	6/ 7/05	12:57	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	68.	56. - 145.
TPH Hi Surr., o-Terphenyl	110.	35. - 135.
VOA Surr, 1,2-DCAd4	82.	72. - 125.
VOA Surr Toluene-d8	93.	80. - 124.
VOA Surr, 4-BFB	94.	25. - 185.
VOA Surr, DBFM	85.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79853
Sample ID: S-40-B8
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 8:28
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	6/ 8/05	12:32	8260B	J. Yun	324
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	6/ 8/05	12:32	8260B	J. Yun	324
**Tertiary butyl alcohol	<46.0		ug/kg	46.0	10.5	1.	6/ 8/05	12:32	8260B	J. Yun	324
**Benzene	0.7	J	ug/kg	1.8	0.7	1.	6/ 8/05	12:32	8260B	J. Yun	324
**Ethylbenzene	643.		ug/kg	91.9	23.0	50.	6/ 9/05	0:31	8260B	J. Adams	344
**Toluene	46.1		ug/kg	1.8	0.5	1.	6/ 8/05	12:32	8260B	J. Yun	324
**Xylenes (Total)	1270		ug/kg	91.9	59.7	50.	6/ 9/05	0:31	8260B	J. Adams	344
**Methyl-t-butyl ether	<1.8		ug/kg	1.8	0.8	1.	6/ 8/05	12:32	8260B	J. Yun	324
Ethanol	<184.		ug/kg	184.	139.	1.	6/ 8/05	12:32	8260B	J. Yun	324
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	6/ 8/05	12:32	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range, C13-C22)	106000		ug/kg	20000	6800	20.	6/ 9/05	13:16	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	12900		ug/kg	2530	15500	50.	6/10/05	1:09	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	85.2	%					6/ 9/05	8:39	CLP	A. Runnels	4885

The TRPH-Diesel surrogate was diluted out due to sample matrix.
Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79853
Sample ID: S-40-B8

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.0 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.44 g	5.0 ml	6/ 1/05	8:28	N. Noman	5035
BTX Prep	4.95 g	5.0 ml	6/ 7/05	13:00	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	99.	56. - 145.
VOA Surr, 1,2-DCAd4	83.	72. - 125.
VOA Surr Toluene-d8	92.	80. - 124.
VOA Surr, 4-BFB	90.	25. - 185.
VOA Surr, DBFM	93.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79854
Sample ID: S-5-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:05
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch

**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	6/ 8/05	13:02	8260B	J. Yun	324
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.7	1.	6/ 8/05	13:02	8260B	J. Yun	324
**Tertiary butyl alcohol	<46.5		ug/kg	46.5	10.6	1.	6/ 8/05	13:02	8260B	J. Yun	324
**Benzene	8.6		ug/kg	1.9	0.7	1.	6/ 8/05	13:02	8260B	J. Yun	324
**Ethylbenzene	260.		ug/kg	92.9	23.2	50.	6/ 9/05	1:01	8260B	J. Adams	344
**Toluene	451.		ug/kg	92.9	23.2	50.	6/ 9/05	1:01	8260B	J. Adams	344
**Xylenes (Total)	1210		ug/kg	92.9	60.4	50.	6/ 9/05	1:01	8260B	J. Adams	344
**Methyl-t-butyl ether	799.		ug/kg	92.9	41.8	50.	6/ 9/05	1:01	8260B	J. Adams	344
Ethanol	<186.		ug/kg	186.	140.	1.	6/ 8/05	13:02	8260B	J. Yun	324
**Diisopropyl ether	<1.9		ug/kg	1.9	0.7	1.	6/ 8/05	13:02	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range, C13-C22)	760	J	ug/kg	1000	340	1.	6/ 8/05	21:56	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	<1000		ug/kg	1000	310	1.	6/ 9/05	23:43	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	89.3	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79854

Sample ID: S-5-B9

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.38 g	5.0 ml	6/ 1/05	10:05	N. Noman	5035
BTX Prep	4.98 g	5.0 ml	6/ 7/05	13:03	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	93.	56. - 145.
TPH Hi Surr., o-Terphenyl	113.	35. - 135.
VOA Surr, 1,2-DCAd4	82.	72. - 125.
VOA Surr Toluene-d8	93.	80. - 124.
VOA Surr, 4-BFB	91.	25. - 185.
VOA Surr, DBFM	94.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79855
Sample ID: S-10-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:10
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	6/ 9/05	7:03	8260B	J. Adams	344
**tert-methyl amyl ether	4.8		ug/Kg	1.7	0.7	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Tertiary butyl alcohol	1150		ug/kg	42.7	9.74	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Benzene	3.0		ug/kg	1.7	0.7	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Ethylbenzene	2.0		ug/kg	1.7	0.4	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Toluene	4.4		ug/kg	1.7	0.4	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Xylenes (Total)	7.5		ug/kg	1.7	1.1	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Methyl-t-butyl ether	9400		ug/kg	171.	76.9	100.	6/ 9/05	6:33	8260B	J. Adams	461
Ethanol	<171.		ug/kg	171.	129.	1.	6/ 9/05	7:03	8260B	J. Adams	344
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	6/ 9/05	7:03	8260/SA05-77	J. Adams	344
**TPH-GC											
**TPH (Diesel Range, C13-C22)	720	J	ug/kg	990	340	1.	6/ 8/05	22:16	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	6380		ug/kg	1010	310	1.	6/10/05	0:12	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	79.2		%				6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A79855
Sample ID: S-10-B9

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
TPH-D	50.3 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.85 g	5.0 ml	6/ 1/05	10:10	N. Noman	5035
BTX Prep	4.97 g	5.0 ml	6/ 7/05	13:10	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	214. #	56. - 145.
TPH Hi Surr., o-Terphenyl	113.	35. - 135.
VOA Surr, 1,2-DCAd4	81.	72. - 125.
VOA Surr Toluene-d8	94.	80. - 124.
VOA Surr, 4-BFB	87.	25. - 185.
VOA Surr, DBFM	91.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79856
Sample ID: S-15-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:15
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.6		ug/kg	1.6	0.6	1.	6/ 8/05	14:02	8260B	J. Yun	324
**tert-methyl amyl ether	<1.6		ug/Kg	1.6	0.7	1.	6/ 8/05	14:02	8260B	J. Yun	324
**Tertiary butyl alcohol	<41.0		ug/kg	41.0	9.34	1.	6/ 8/05	14:02	8260B	J. Yun	324
**Benzene	91.8		ug/kg	1.6	0.7	1.	6/ 8/05	14:02	8260B	J. Yun	324
**Ethylbenzene	3520		ug/kg	82.0	20.5	50.	6/ 9/05	2:32	8260B	J. Adams	344
**Toluene	2320		ug/kg	82.0	20.5	50.	6/ 9/05	2:32	8260B	J. Adams	344
**Xylenes (Total)	22700		ug/kg	820.	533.	500.	6/ 9/05	3:02	8260B	J. Adams	461
**Methyl-t-butyl ether	12800		ug/kg	820.	369.	500.	6/ 9/05	3:02	8260B	J. Adams	461
Ethanol	<164.		ug/kg	164.	124.	1.	6/ 8/05	14:02	8260B	J. Yun	324
**Diisopropyl ether	<1.6		ug/kg	1.6	0.7	1.	6/ 8/05	14:02	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range, C13-C22)	2590		ug/kg	1000	340	1.	6/ 8/05	22:36	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	180000		ug/kg	2500	15500	50.	6/10/05	1:38	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	74.6		%				6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79856

Sample ID: S-15-B9

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
TPH-D	49.9 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	12.2 g	10.0 ml	6/ 1/05	10:15	N. Noman	5035
BTX Prep	5.01 g	5.0 ml	6/ 7/05	13:15	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	94.	56. - 145.
TPH Hi Surr., o-Terphenyl	117.	35. - 135.
VOA Surr, 1,2-DCAd4	81.	72. - 125.
VOA Surr Toluene-d8	96.	80. - 124.
VOA Surr, 4-BFB	89.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79857

Sample ID: S-20-B9

Sample Type: Soil

Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05

Time Collected: 10:20

Date Received: 6/ 3/05

Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<78.7		ug/kg	78.7	27.6	50.	6/ 9/05	3:32	8260B	J. Adams	344
**tert-methyl amyl ether	<78.7		ug/Kg	78.7	31.5	50.	6/ 9/05	3:32	8260B	J. Adams	344
**Tertiary butyl alcohol	11400		ug/kg	1970	449.	50.	6/ 9/05	3:32	8260B	J. Adams	344
**Benzene	831.		ug/kg	78.7	31.5	50.	6/ 9/05	3:32	8260B	J. Adams	344
**Ethylbenzene	47600		ug/kg	787.	197.	500.	6/ 9/05	4:02	8260B	J. Adams	461
**Toluene	74400		ug/kg	787.	197.	500.	6/ 9/05	4:02	8260B	J. Adams	461
**Xylenes (Total)	275000		ug/kg	1570	1020	1000	6/ 9/05	16:34	8260B	J. Yun	1023
**Methyl-t-butyl ether	31700		ug/kg	787.	354.	500.	6/ 9/05	4:02	8260B	J. Adams	461
Ethanol	<7870		ug/kg	7870	5940	50.	6/ 9/05	3:32	8260B	J. Adams	344
**Diisopropyl ether	<78.7		ug/kg	78.7	31.5	50.	6/ 9/05	3:32	8260/SA05-77	J. Adams	344
**TPH-GC											
**TPH (Diesel Range, C13-C22)	5790		ug/kg	1010	340	1.	6/ 8/05	22:57	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	539000		ug/kg	12400	77500	250.	6/10/05	2:07	CA-LUFT	H. Wagner	3761

**Miscellaneous Parameters

% Dry Weight	88.5	%				6/ 9/05	8:39	CLP		A. Runnels	4885
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8260 PQL's elevated due to sample matrix.

Analysis at a lower dilution did not meet method QC requirements.

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79857
Sample ID: S-20-B9

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.7 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	12.7 g	10.0 ml	6/ 1/05	10:20	N. Noman	5035
BTX Prep	5.04 g	5.0 ml	6/ 7/05	13:17	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	120.	56. - 145.
TPH Hi Surr., o-Terphenyl	108.	35. - 135.
VOA Surr, 1,2-DCAd4	86.	72. - 125.
VOA Surr Toluene-d8	94.	80. - 124.
VOA Surr, 4-BFB	94.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79858
Sample ID: S-25-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:25
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.4		ug/kg	1.4	0.5	1.	6/ 8/05	15:02	8260B	J. Yun	324
**tert-methyl amyl ether	<1.4		ug/Kg	1.4	0.5	1.	6/ 8/05	15:02	8260B	J. Yun	324
**Tertiary butyl alcohol	625.		ug/kg	34.2	7.81	1.	6/ 8/05	15:02	8260B	J. Yun	324
**Benzene	34.3		ug/kg	1.4	0.5	1.	6/ 8/05	15:02	8260B	J. Yun	324
**Ethylbenzene	140.		ug/kg	68.5	17.1	50.	6/ 9/05	17:04	8260B	J. Yun	1023
**Toluene	445.		ug/kg	68.5	17.1	50.	6/ 9/05	17:04	8260B	J. Yun	1023
**Xylenes (Total)	705.		ug/kg	68.5	44.5	50.	6/ 9/05	17:04	8260B	J. Yun	1023
**Methyl-t-butyl ether	6850		ug/kg	68.5	30.8	50.	6/ 9/05	17:04	8260B	J. Yun	1023
Ethanol	<137.		ug/kg	137.	103.	1.	6/ 8/05	15:02	8260B	J. Yun	324
**Diisopropyl ether	<1.4		ug/kg	1.4	0.5	1.	6/ 8/05	15:02	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range,C13-C22)	43400		ug/kg	2010	680	2.	6/ 9/05	11:32	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	1800000		ug/kg	50300	310000	1000	6/10/05	2:35	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	93.1	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79858
Sample ID: S-25-B9

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	14.6 g	10.0 ml	6/ 1/05	10:25	N. Noman	5035
BTX Prep	4.97 g	5.0 ml	6/ 7/05	13:22	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	123.	56. - 145.
TPH Hi Surr., o-Terphenyl	102.	35. - 135.
VOA Surr, 1,2-DCAd4	86.	72. - 125.
VOA Surr Toluene-d8	93.	80. - 124.
VOA Surr, 4-BFB	88.	25. - 185.
VOA Surr, DBFM	91.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79859
Sample ID: S-30-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:30
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch

**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	6/ 8/05	11:02	8260B	J. Yun	324
**tert-methyl amyl ether	<1.7		ug/Kg	1.7	0.7	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Tertiary butyl alcohol	<41.7		ug/kg	41.7	9.50	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Benzene	1.6	J	ug/kg	1.7	0.7	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Ethylbenzene	1800		ug/kg	83.3	20.8	50.	6/ 8/05	18:32	8260B	J. Adams	465
**Toluene	17.4		ug/kg	1.7	0.4	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Xylenes (Total)	105.		ug/kg	1.7	1.1	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Methyl-t-butyl ether	11.5		ug/kg	1.7	0.8	1.	6/ 8/05	11:02	8260B	J. Yun	324
Ethanol	<167.		ug/kg	167.	126.	1.	6/ 8/05	11:02	8260B	J. Yun	324
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	6/ 8/05	11:02	8260/SA05-77	J. Yun	324
**TPH-GC											
**TPH (Diesel Range, C13-C22)	13800		ug/kg	1000	340	1.	6/ 8/05	23:38	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	316000		ug/kg	5010	31000	100.	6/10/05	3:04	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	89.6	%					6/ 9/05	8:39	CLP	A. Runnels	4885

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79859

Sample ID: S-30-B9

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.0 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	6.00 g	5.0 ml	6/ 1/05	10:30	N. Noman	5035
BTX Prep	4.99 g	5.0 ml	6/ 7/05	13:25	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	76.	56. - 145.
TPH Hi Surr., o-Terphenyl	106.	35. - 135.
VOA Surr, 1,2-DCAd4	80.	72. - 125.
VOA Surr Toluene-d8	98.	80. - 124.
VOA Surr, 4-BFB	90.	25. - 185.
VOA Surr, DBPM	92.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79860
Sample ID: S-35-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:40
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	6/ 9/05	1:31	8260B	J. Adams	344
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	6/ 9/05	1:31	8260B	J. Adams	344
**Tertiary butyl alcohol	363.		ug/kg	44.9	10.2	1.	6/ 9/05	1:31	8260B	J. Adams	344
**Benzene	7.3		ug/kg	1.8	0.7	1.	6/ 9/05	1:31	8260B	J. Adams	344
**Ethylbenzene	1020		ug/kg	89.8	22.4	50.	6/ 9/05	2:02	8260B	J. Adams	461
**Toluene	1330		ug/kg	89.8	22.4	50.	6/ 9/05	2:02	8260B	J. Adams	461
**Xylenes (Total)	5770		ug/kg	89.8	58.3	50.	6/ 9/05	2:02	8260B	J. Adams	461
**Methyl-t-butyl ether	1050		ug/kg	89.8	40.4	50.	6/ 9/05	2:02	8260B	J. Adams	461
Ethanol	<180.		ug/kg	180.	136.	1.	6/ 9/05	1:31	8260B	J. Adams	344
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	6/ 9/05	1:31	8260/SA05-77	J. Adams	344
**TPH-GC											
**TPH (Diesel Range, C13-C22)	2240		ug/kg	1000	340	1.	6/ 8/05	23:59	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	9570		ug/kg	1010	310	1.	6/10/05	0:41	CA-LUFT	H. Wagner	3761

**Miscellaneous Parameters

% Dry Weight	84.7	%					6/ 9/05	8:39	CLP	A. Runnels	4885
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Volatile sample was received in a metal tube.

GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A79860

Sample ID: S-35-B9

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Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.0 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	5.57 g	5.0 ml	6/ 1/05	10:40	N. Noman	5035
BTX Prep	4.97 g	5.0 ml	6/ 7/05	13:28	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	231. #	56. - 145.
TPH Hi Surr., o-Terphenyl	103.	35. - 135.
VOA Surr, 1,2-DCAd4	82.	72. - 125.
VOA Surr Toluene-d8	94.	80. - 124.
VOA Surr, 4-BFB	91.	25. - 185.
VOA Surr, DBFM	93.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79861
Sample ID: S-40-B9
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 1/05
Time Collected: 10:45
Date Received: 6/ 3/05
Time Received: 7:55

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<86.2		ug/kg	86.2	30.2	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**tert-methyl amyl ether	<86.2		ug/Kg	86.2	34.5	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Tertiary butyl alcohol	<2160		ug/kg	2160	491.	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Benzene	<86.2		ug/kg	86.2	34.5	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Ethylbenzene	77.6	J	ug/kg	86.2	21.6	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Toluene	47.4	J	ug/kg	86.2	21.6	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Xylenes (Total)	172.		ug/kg	86.2	56.0	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Methyl-t-butyl ether	64.7	J	ug/kg	86.2	38.8	50.	6/ 9/05	17:34	8260B	J. Yun	1023
Ethanol	<8620		ug/kg	8620	6510	50.	6/ 9/05	17:34	8260B	J. Yun	1023
**Diisopropyl ether	<86.2		ug/kg	86.2	34.5	50.	6/ 9/05	17:34	8260/SA05-77	J. Yun	1023
**TPH-GC											
**TPH (Diesel Range,C13-C22)	129000		ug/kg	10000	3400	10.	6/ 9/05	11:53	8015B/CA-LUFTB.	Yanna	9991
**TPH (GRO C4-C12)	1060000		ug/kg	25100	155000	500.	6/10/05	3:33	CA-LUFT	H. Wagner	3761
**Miscellaneous Parameters											
% Dry Weight	81.6	%					6/ 9/05	8:39	CLP	A. Runnels	4885

The TRPH-Diesel surrogate was diluted out due to sample matrix.

8260 PQL's elevated due to sample matrix.

Analysis at a lower dilution did not meet method QC requirements.

GRO surrogate recovery elevated due to sample matrix.

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A79861

Sample ID: S-40-B9

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
TPH-D	50.0 ml	1.0 ml	6/ 4/05	15:16	K. Turner	3550
Volatile Organics	11.6 g	10.0 ml	6/ 1/05	10:45	N. Noman	5035
BTX Prep	4.99 g	5.0 ml	6/ 7/05	13:31	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	196. #	56. - 145.
VOA Surr, 1,2-DCAd4	78.	72. - 125.
VOA Surr Toluene-d8	109.	80. - 124.
VOA Surr, 4-BFB	89.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

PROJECT QUALITY CONTROL DATA

Project Number:

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Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample

UST ANALYSIS								
TPH (Diesel Range,C13-C22)	mg/kg	13.8	25.0	20.0	56	28. - 143.	9991	05-A79859
TPH (Diesel Range,C13-C22)	mg/kg	13.8	26.4	20.0	63	28. - 143.	9991	M:05A79859
TPH (GRO C4-C12)	mg/kg	< 2.50	432.	500.	86	52. - 150.	3761	79853
TPH (GRO C4-C12)	mg/kg	< 2.50	413.	500.	83	52. - 150.	3761	M:79853

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample

VOA PARAMETERS								
Benzene	mg/kg	< 0.0008	0.0581	0.0500	116	53. - 136.	324	blank
Benzene	mg/kg	< 0.0008	0.0587	0.0500	117	53. - 136.	324	M:blank
Benzene	mg/kg	< 0.0008	0.0525	0.0500	105	53. - 136.	9337	blank
Benzene	mg/kg	< 0.0008	0.0481	0.0500	96	53. - 136.	9337	M:blank
Benzene	mg/kg	< 0.0008	0.0543	0.0500	109	53. - 136.	344	blank
Benzene	mg/kg	< 0.0008	0.0594	0.0500	119	53. - 136.	344	M:blank
Benzene	mg/kg	< 0.0008	0.0517	0.0500	103	53. - 136.	1023	blank
Benzene	mg/kg	< 0.0008	0.0452	0.0500	90	53. - 136.	1023	M:blank
Toluene	mg/kg	< 0.0005	0.0554	0.0500	111	43. - 139.	324	blank
Toluene	mg/kg	< 0.0005	0.0552	0.0500	110	43. - 139.	324	M:blank
Toluene	mg/kg	< 0.0005	0.0505	0.0500	101	43. - 139.	9337	blank
Toluene	mg/kg	< 0.0005	0.0451	0.0500	90	43. - 139.	9337	M:blank
Toluene	mg/kg	< 0.0005	0.0484	0.0500	97	43. - 139.	344	blank
Toluene	mg/kg	< 0.0005	0.0515	0.0500	103	43. - 139.	344	M:blank
Toluene	mg/kg	< 0.0005	0.0449	0.0500	90	43. - 139.	1023	blank
Toluene	mg/kg	< 0.0005	0.0405	0.0500	81	43. - 139.	1023	M:blank
VOA Surr, 1,2-DCAd4	% Rec				95	72. - 125.	324	
VOA Surr, 1,2-DCAd4	% Rec				91	72. - 125.	324	
VOA Surr, 1,2-DCAd4	% Rec				87	72. - 125.	344	
VOA Surr, 1,2-DCAd4	% Rec				87	72. - 125.	344	
VOA Surr, 1,2-DCAd4	% Rec				91	72. - 125.	1023	

PROJECT QUALITY CONTROL DATA

Project Number:

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Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA Surr, 1,2-DCAd4	% Rec				92	72. - 125.	1023	
VOA Surr Toluene-d8	% Rec				92	80. - 124.	324	
VOA Surr Toluene-d8	% Rec				91	80. - 124.	324	
VOA Surr Toluene-d8	% Rec				89	80. - 124.	344	
VOA Surr Toluene-d8	% Rec				91	80. - 124.	344	
VOA Surr Toluene-d8	% Rec				91	80. - 124.	1023	
VOA Surr Toluene-d8	% Rec				91	80. - 124.	1023	
VOA Surr, 4-BFB	% Rec				91	25. - 185.	324	
VOA Surr, 4-BFB	% Rec				90	25. - 185.	324	
VOA Surr, 4-BFB	% Rec				87	25. - 185.	344	
VOA Surr, 4-BFB	% Rec				89	25. - 185.	344	
VOA Surr, 4-BFB	% Rec				88	25. - 185.	1023	
VOA Surr, 4-BFB	% Rec				87	25. - 185.	1023	
VOA Surr, DBFM	% Rec				94	73. - 124.	324	
VOA Surr, DBFM	% Rec				92	73. - 124.	324	
VOA Surr, DBFM	% Rec				95	73. - 124.	344	
VOA Surr, DBFM	% Rec				97	73. - 124.	344	
VOA Surr, DBFM	% Rec				94	73. - 124.	1023	
VOA Surr, DBFM	% Rec				93	73. - 124.	1023	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
TPH (Diesel Range,C13-C22)	mg/kg	25.0	26.4	5.45	51.	9991
TPH (GRO C4-C12)	mg/kg	432.	413.	4.50	39.	3761

PROJECT QUALITY CONTROL DATA

Project Number:

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Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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VOA PARAMETERS

Benzene	mg/kg	0.0581	0.0587	1.03	34.	324
Benzene	mg/kg	0.0525	0.0481	8.75	34.	9337
Benzene	mg/kg	0.0543	0.0594	8.97	34.	344
Benzene	mg/kg	0.0517	0.0452	13.42	34.	1023
Toluene	mg/kg	0.0554	0.0552	0.36	39.	324
Toluene	mg/kg	0.0505	0.0451	11.30	39.	9337
Toluene	mg/kg	0.0484	0.0515	6.21	39.	344
Toluene	mg/kg	0.0449	0.0405	10.30	39.	1023
VOA Surr, 1,2-DCAd4	% Rec		91.			324
VOA Surr, 1,2-DCAd4	% Rec		87.			344
VOA Surr, 1,2-DCAd4	% Rec		92.			1023
VOA Surr Toluene-d8	% Rec		91.			324
VOA Surr Toluene-d8	% Rec		91.			344
VOA Surr Toluene-d8	% Rec		91.			1023
VOA Surr, 4-BFB	% Rec		90.			324
VOA Surr, 4-BFB	% Rec		89.			344
VOA Surr, 4-BFB	% Rec		87.			1023
VOA Surr, DBFM	% Rec		92.			324
VOA Surr, DBFM	% Rec		97.			344
VOA Surr, DBFM	% Rec		93.			1023

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
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UST PARAMETERS

TPH (Diesel Range, C13-C22)	mg/kg	20.0	16.2	81	54 - 126	9991
TPH (GRO C4-C12)	mg/kg	10.0	10.1	101	74 - 127	3761

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
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VOA PARAMETERS

Ethyl-t-butylether	mg/kg	0.0500	0.0525	105	67 - 137	9337
Ethyl-t-butylether	mg/kg	0.0500	0.0480	96	67 - 137	324
Ethyl-t-butylether	mg/kg	0.0500	0.0481	96	67 - 137	344
Ethyl-t-butylether	mg/kg	0.0500	0.0511	102	67 - 137	1023
tert-methyl amyl ether	mg/Kg	0.0500	0.0526	105	64 - 142	9337
tert-methyl amyl ether	mg/Kg	0.0500	0.0438	88	64 - 142	324
tert-methyl amyl ether	mg/Kg	0.0500	0.0435	87	64 - 142	344
tert-methyl amyl ether	mg/Kg	0.0500	0.0459	92	64 - 142	1023
Tertiary butyl alcohol	mg/kg	0.500	0.499	100	36 - 159	9337
Tertiary butyl alcohol	mg/kg	0.500	0.426	85	36 - 159	324
Tertiary butyl alcohol	mg/kg	0.500	0.385	77	36 - 159	344
Tertiary butyl alcohol	mg/kg	0.500	0.437	87	36 - 159	9340
Tertiary butyl alcohol	mg/kg	0.500	0.416	83	36 - 159	1023
Benzene	mg/kg	0.0500	0.0523	105	76 - 124	9337
Benzene	mg/kg	0.0500	0.0500	100	76 - 124	324
Benzene	mg/kg	0.0500	0.0506	101	76 - 124	344
Benzene	mg/kg	0.0500	0.0533	107	76 - 124	1023
Ethylbenzene	mg/kg	0.0500	0.0500	100	70 - 128	9337
Ethylbenzene	mg/kg	0.0500	0.0463	93	70 - 128	324

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Ethylbenzene	mg/kg	0.0500	0.0464	93	70 - 128	344
Ethylbenzene	mg/kg	0.0500	0.0463	93	70 - 128	465
Ethylbenzene	mg/kg	0.0500	0.0473	95	70 - 128	1023
Toluene	mg/kg	0.0500	0.0512	102	72 - 125	9337
Toluene	mg/kg	0.0500	0.0468	94	72 - 125	324
Toluene	mg/kg	0.0500	0.0463	93	72 - 125	344
Toluene	mg/kg	0.0500	0.0479	96	72 - 125	1023
Xylenes (Total)	mg/kg	0.150	0.144	96	71 - 129	9337
Xylenes (Total)	mg/kg	0.150	0.132	88	71 - 129	324
Xylenes (Total)	mg/kg	0.150	0.134	89	71 - 129	344
Xylenes (Total)	mg/kg	0.150	0.136	91	71 - 129	1023
Methyl-t-butyl ether	mg/kg	0.0500	0.0535	107	67 - 138	9337
Methyl-t-butyl ether	mg/kg	0.0500	0.0497	99	67 - 138	324
Methyl-t-butyl ether	mg/kg	0.0500	0.0496	99	67 - 138	344
Methyl-t-butyl ether	mg/kg	0.0500	0.0456	91	67 - 138	9340
Methyl-t-butyl ether	mg/kg	0.0500	0.0540	108	67 - 138	1023
Ethanol	mg/kg	5.00	5.36	107	48 - 159	9337
Ethanol	mg/kg	5.00	4.47	89	48 - 159	324
Ethanol	mg/kg	5.00	4.31	86	48 - 159	344
Ethanol	mg/kg	5.00	4.55	91	48 - 159	1023
Diisopropyl ether	mg/kg	0.0500	0.0504	101	70 - 131	9337
Diisopropyl ether	mg/kg	0.0500	0.0466	93	70 - 131	324
Diisopropyl ether	mg/kg	0.0500	0.0459	92	70 - 131	344
Diisopropyl ether	mg/kg	0.0500	0.0490	98	70 - 131	1023
VOA Surr, 1,2-DCAd4	% Rec			82	72 - 125	324
VOA Surr, 1,2-DCAd4	% Rec			94	72 - 125	344
VOA Surr, 1,2-DCAd4	% Rec			82	72 - 125	465
VOA Surr, 1,2-DCAd4	% Rec			99	72 - 125	9340
VOA Surr, 1,2-DCAd4	% Rec			84	72 - 125	1023
VOA Surr Toluene-d8	% Rec			92	80 - 124	324
VOA Surr Toluene-d8	% Rec			91	80 - 124	344
VOA Surr Toluene-d8	% Rec			92	80 - 124	465
VOA Surr Toluene-d8	% Rec			100	80 - 124	9340
VOA Surr Toluene-d8	% Rec			90	80 - 124	1023
VOA Surr, 4-BFB	% Rec			91	25 - 185	324

PROJECT QUALITY CONTROL DATA

Project Number:

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Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val.	% Recovery	Target Range	Q.C. Batch
VOA Surr, 4-BFB	% Rec			87	25 - 185	344
VOA Surr, 4-BFB	% Rec			91	25 - 185	465
VOA Surr, 4-BFB	% Rec			103	25 - 185	9340
VOA Surr, 4-BFB	% Rec			90	25 - 185	1023
VOA Surr, DBFM	% Rec			91	73 - 124	324
VOA Surr, DBFM	% Rec			94	73 - 124	344
VOA Surr, DBFM	% Rec			91	73 - 124	465
VOA Surr, DBFM	% Rec			87	73 - 124	9340
VOA Surr, DBFM	% Rec			94	73 - 124	1023

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
TPH (Diesel Range,C13-C22)	0.46	mg/kg	9991	6/ 8/05	17:08
TPH (GRO C4-C12)	< 0.31	mg/kg	3761	6/ 9/05	19:54

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
UST surr-Trifluorotoluene	70.	% Recovery	3761	6/ 9/05	19:54

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					
Ethyl-t-butylether	< 0.0007	mg/kg	9337	6/ 7/05	22:29
Ethyl-t-butylether	< 0.0007	mg/kg	324	6/ 8/05	10:32

PROJECT QUALITY CONTROL DATA

Project Number:

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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Ethyl-t-butylether	< 0.0007	mg/kg	344	6/ 8/05	23:31
Ethyl-t-butylether	< 0.0007	mg/kg	1023	6/ 9/05	11:33
tert-methyl amyl ether	< 0.0008	mg/Kg	9337	6/ 7/05	22:29
tert-methyl amyl ether	< 0.0008	mg/Kg	324	6/ 8/05	10:32
tert-methyl amyl ether	< 0.0008	mg/Kg	344	6/ 8/05	23:31
tert-methyl amyl ether	< 0.0008	mg/Kg	1023	6/ 9/05	11:33
Tertiary butyl alcohol	< 0.0114	mg/kg	9337	6/ 7/05	22:29
Tertiary butyl alcohol	< 0.0114	mg/kg	324	6/ 8/05	10:32
Tertiary butyl alcohol	< 0.0114	mg/kg	344	6/ 8/05	23:31
Tertiary butyl alcohol	< 0.0114	mg/kg	9340	6/ 8/05	11:59
Tertiary butyl alcohol	< 0.0114	mg/kg	1023	6/ 9/05	11:33
Benzene	< 0.0008	mg/kg	9337	6/ 7/05	22:29
Benzene	< 0.0008	mg/kg	324	6/ 8/05	10:32
Benzene	< 0.0008	mg/kg	344	6/ 8/05	23:31
Benzene	< 0.0008	mg/kg	1023	6/ 9/05	11:33
Ethylbenzene	< 0.0005	mg/kg	9337	6/ 7/05	22:29
Ethylbenzene	< 0.0005	mg/kg	324	6/ 8/05	10:32
Ethylbenzene	< 0.0005	mg/kg	344	6/ 8/05	23:31
Ethylbenzene	< 0.0005	mg/kg	465	6/ 8/05	10:32
Ethylbenzene	< 0.0005	mg/kg	1023	6/ 9/05	11:33
Toluene	< 0.0005	mg/kg	9337	6/ 7/05	22:29
Toluene	< 0.0005	mg/kg	324	6/ 8/05	10:32
Toluene	< 0.0005	mg/kg	344	6/ 8/05	23:31
Toluene	< 0.0005	mg/kg	1023	6/ 9/05	11:33
Xylenes (Total)	< 0.0013	mg/kg	9337	6/ 7/05	22:29
Xylenes (Total)	< 0.0013	mg/kg	324	6/ 8/05	10:32
Xylenes (Total)	< 0.0013	mg/kg	344	6/ 8/05	23:31
Xylenes (Total)	< 0.0013	mg/kg	1023	6/ 9/05	11:33
Methyl-t-butyl ether	< 0.0009	mg/kg	9337	6/ 7/05	22:29
Methyl-t-butyl ether	< 0.0009	mg/kg	324	6/ 8/05	10:32
Methyl-t-butyl ether	< 0.0009	mg/kg	344	6/ 8/05	23:31
Methyl-t-butyl ether	< 0.0009	mg/kg	9340	6/ 8/05	11:59
Methyl-t-butyl ether	< 0.0009	mg/kg	1023	6/ 9/05	11:33
Ethanol	< 0.151	mg/kg	9337	6/ 7/05	22:29
Ethanol	< 0.151	mg/kg	324	6/ 8/05	10:32

PROJECT QUALITY CONTROL DATA

Project Number:

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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Ethanol	< 0.151	mg/kg	344	6/ 8/05	23:31
Ethanol	< 0.151	mg/kg	1023	6/ 9/05	11:33
Diisopropyl ether	< 0.0008	mg/kg	9337	6/ 7/05	22:29
Diisopropyl ether	< 0.0008	mg/kg	324	6/ 8/05	10:32
Diisopropyl ether	< 0.0008	mg/kg	344	6/ 8/05	23:31
Diisopropyl ether	< 0.0008	mg/kg	1023	6/ 9/05	11:33
VOA Surr, 1,2-DCAd4	84.	% Rec	324	6/ 8/05	10:32
VOA Surr, 1,2-DCAd4	84.	% Rec	344	6/ 8/05	23:31
VOA Surr, 1,2-DCAd4	84.	% Rec	465	6/ 8/05	10:32
VOA Surr, 1,2-DCAd4	103.	% Rec	9340	6/ 8/05	11:59
VOA Surr, 1,2-DCAd4	87.	% Rec	1023	6/ 9/05	11:33
VOA Surr Toluene-d8	95.	% Rec	324	6/ 8/05	10:32
VOA Surr Toluene-d8	95.	% Rec	344	6/ 8/05	23:31
VOA Surr Toluene-d8	95.	% Rec	465	6/ 8/05	10:32
VOA Surr Toluene-d8	101.	% Rec	9340	6/ 8/05	11:59
VOA Surr Toluene-d8	93.	% Rec	1023	6/ 9/05	11:33
VOA Surr, 4-BFB	92.	% Rec	324	6/ 8/05	10:32
VOA Surr, 4-BFB	87.	% Rec	344	6/ 8/05	23:31
VOA Surr, 4-BFB	92.	% Rec	465	6/ 8/05	10:32
VOA Surr, 4-BFB	99.	% Rec	9340	6/ 8/05	11:59
VOA Surr, 4-BFB	89.	% Rec	1023	6/ 9/05	11:33
VOA Surr, DBFM	87.	% Rec	324	6/ 8/05	10:32
VOA Surr, DBFM	86.	% Rec	344	6/ 8/05	23:31
VOA Surr, DBFM	87.	% Rec	465	6/ 8/05	10:32
VOA Surr, DBFM	89.	% Rec	9340	6/ 8/05	11:59
VOA Surr, DBFM	89.	% Rec	1023	6/ 9/05	11:33

= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 418324

Nashville Division

COOLER RECEIPT FORM

BC#



Client Name : ERI

Cooler Received/Opened On: 6/3/05 Accessioned By: James D. Jacobs

[Signature]
Log-in Personnel Signature

1. Temperature of Cooler when triaged: 4.2 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
 - a. If yes, how many and where: _____
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
5. Were custody papers inside cooler?..... YES...NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert
Ziplock baggies Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA
 - b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA

If not, record standard ID of preservative used here _____
17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:
4224
Fed-Ex UPS Velocity DHL Route Off-street Misc.
19. If a Non-Conformance exists, see attached or comments below:

418324

Consultant Name: Environmental Resolutions, Inc.

TA Account #:

10203

Address: 20372 North Sea Circle

Invoice To:

ExxonMobil

City/State/Zip: Lake Forest, CA 92630

Report To:

George Salley

ExxonMobil Territory Mgr: Marla Guensler

PO #:

~~2003 Pending~~ 4506125986

Consultant Project Mgr: George Salley

Facility ID #

Mobil Station 18MLJ

Consultant Telephone Number: 949-457-8950

Fax No.: 949-457-8956

Site Address:

5005 N. Long Beach Blvd.

Sampler Name: (Print)

Russell Pace

City, State, Zip

Long Beach, CA

Sampler Signature:

[Signature]

Regulatory District (CA)

SCRWQCB

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative								Matrix					Analyze For:										Due Date of Report																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
							Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass(Yellow Label)	HNO ₃ (Red Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	TPH/DIESEL	TPH/GAS-CAL LUFT	FULL SCAN 8260B +OXYGENATES	METHANOL	ETHANOL	*8260B/BTEX +OXYGENATES ONLY	BTEX/MTBE BY 8021	8010	REDOX POTENTIAL		NITRATE/SULFATE	METHANE(8015)	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days	Fax Results (yes or no)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
S - 5 - B8	6/1/05	0800	4	X			X	X											X		X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Comments/Special Instructions:

5 DAY TURN-AROUND FOR EXXONMOBIL REQUIRED

CONSULTANT ID # ERIL
GLOBAL ID #

"PLEASE E-MAIL ALL EDF FILES TO
RSHEARER@ERI-US.COM"

Relinquished by:

Date

Time

Received by:

Date

Time

Russell Pace

6/1/05

1515

N. Waterbury

6/2/05 1140

Relinquished by:

Date

Time

Received by (Lab personnel)

Date

Time

[Signature]

6/2

14:30

[Signature]

6/3/05

255

Laboratory Comments:

Temperature Upon Receipt: 4.2°C

Sample Containers Intact? ☒ N

VOCs Free of Headspace? ☒ N

QC Deliverables (please circle one)

Level 2

Level 3

Level 4

Site Specific-if yes, please

pre-schedule w/ TestAmerica

Project Manager or attach specific instructions

ExxonMobil

418324

Consultant Name: Environmental Resolutions, Inc.

TA Account #:

10203

Address: 20372 North Sea Circle

Invoice To:

ExxonMobil

City/State/Zip: Lake Forest, CA 92630

Report To:

George Salley

ExxonMobil Territory Mgr: Marla Guensler

PO #:

~~2005~~ - Pending 4306125986

Consultant Project Mgr: George Salley

Facility ID #

Mobil Station 18MLJ

Consultant Telephone Number: 949-457-8950

Fax No.: 949-457-8956

Site Address

5005 N. Long Beach Blvd.

Sampler Name: (Print)

Russell

City, State, Zip

Long Beach, CA

Sampler Signature:

Rose R.

Regulatory District (CA)

SCRWQCB

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix					Analyze For:										Due Date of Report	
							Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	HNO ₃ (Red Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	TPH/Diesel	TPH/GAS-CAL LUFT	FULL SCAN 8260B +OXYGENATES	METHANOL	ETHANOL	*8260B/BTEX +OXYGENATES ONLY	BTEX/MTBE BY 8021	8010		REDOX POTENTIAL
S-15-B9	6/1/05	1015	4	X			X	X								X	X			X	X		89	85	6		X			
S-20-B9		1020																					85	7						
S-25-B9		1025																					85	8						
S-30-B9		1030																					85	9						
S-35-B9		1040																					86	0						
S-40-B9		1045																				89	86	1						
Comments/Special Instructions:							Laboratory Comments:																							
5 DAY TURN-AROUND FOR EXXONMOBIL REQUIRED							CONSULTANT ID # ERIL GLOBAL ID #							"PLEASE E-MAIL ALL EDF FILES TO RSHEARER@ERI-US.COM"							Temperature Upon Receipt: 4.2°C									
																					Sample Containers Intact? <input checked="" type="checkbox"/> N									
Relinquished by: Russell Pace							Date: 6/1/05 Time: 1515 Received by: N. Waterbury							Date: 6/2/05 Time: 1140							VOCs Free of Headspace? Y N									
																					QC Deliverables (please circle one)									
Relinquished by: P. Pace							Date: 6/2 Time: 1430 Received by: J. Smith							Date: 6/3/05 Time: 255							Level 2									
																					Level 3									
																					Level 4									
																					Site Specific-if yes, please pre-schedule w/ TestAmerica									
																					Project Manager or attach specific instructions									

6/17/05

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-MLJ
Project Number: .
Laboratory Project Number: 418965.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Page 1

Sample Identification	Lab Number	Collection Date
-----	-----	-----
S-5-B10	05-A82807	6/ 2/05
S-10-B10	05-A82808	6/ 2/05
S-15-B10	05-A82809	6/ 2/05
S-20-B10	05-A82810	6/ 2/05
S-25-B10	05-A82811	6/ 2/05
S-30-B10	05-A82812	6/ 2/05
S-35-B10	05-A82813	6/ 2/05
S-40-B10	05-A82814	6/ 2/05

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.

This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Roxanne L Connor

Report Date: 6/17/05

Johnny A. Mitchell, Laboratory Director
Michael H. Dunn, M.S., Technical Director
Pamela A. Langford, Senior Project Manager
Eric S. Smith, QA/QC Director

Gail A. Lage, Senior Project Manager
Glenn L. Norton, Technical Services
Kelly S. Comstock, Technical Services
Roxanne L. Connor, Senior Project Manager

Laboratory Certification Number: 01168CA

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82807
Sample ID: S-5-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.1		ug/kg	2.1	0.7	1.	6/11/05	10:28	8260B	J. Bundy	2688
**tert-methyl amyl ether	<2.1		ug/Kg	2.1	0.8	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Tertiary butyl alcohol	43.7	J	ug/kg	52.7	12.0	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Benzene	5.9		ug/kg	2.1	0.8	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Ethylbenzene	0.9	J	ug/kg	2.1	0.5	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Toluene	5.9		ug/kg	2.1	0.5	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Xylenes (Total)	<2.1		ug/kg	2.1	1.4	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Methyl-t-butyl ether	33.2		ug/kg	2.1	0.9	1.	6/11/05	10:28	8260B	J. Bundy	2688
Ethanol	<211.		ug/kg	211.	159.	1.	6/11/05	10:28	8260B	J. Bundy	2688
**Diisopropyl ether	<2.1		ug/kg	2.1	0.8	1.	6/11/05	10:28	8260/SA05-77	J. Bundy	2688
**TPH-GC											
**TPH (Diesel Range, C13-C22)	1060		ug/kg	1000	340	1.	6/16/05	15:57	8015B/CA-LUFTM.	Jarrett	5982
**TPH (GRO C4-C12)	<100		ug/kg	100	310	1.	6/15/05	18:15	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	76.6	%					6/14/05	13:35	CLP	A. Runnels	2353

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82807

Sample ID: S-5-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.0 ml	1.0 ml	6/13/05	13:26	K. Turner	3550
Volatile Organics	4.74 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	5.01 g	5.0 ml	6/14/05	15:53	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	71.	56. - 145.
TPH Hi Surr., o-Terphenyl	107.	35. - 135.
VOA Surr, 1,2-DCAd4	78.	72. - 125.
VOA Surr Toluene-d8	92.	80. - 124.
VOA Surr, 4-BFB	89.	25. - 185.
VOA Surr, DBFM	85.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82808
Sample ID: S-10-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.0		ug/kg	2.0	0.7	1.	6/11/05	10:58	8260B	J. Bundy	2688
**tert-methyl amyl ether	<2.0		ug/Kg	2.0	0.8	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Tertiary butyl alcohol	152.		ug/kg	48.9	11.2	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Benzene	3.5		ug/kg	2.0	0.8	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Ethylbenzene	<2.0		ug/kg	2.0	0.5	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Toluene	3.1		ug/kg	2.0	0.5	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Xylenes (Total)	<2.0		ug/kg	2.0	1.3	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Methyl-t-butyl ether	32.5		ug/kg	2.0	0.9	1.	6/11/05	10:58	8260B	J. Bundy	2688
Ethanol	<196.		ug/kg	196.	148.	1.	6/11/05	10:58	8260B	J. Bundy	2688
**Diisopropyl ether	<2.0		ug/kg	2.0	0.8	1.	6/11/05	10:58	8260/SA05-77	J. Bundy	2688
**TPH-GC											
**TPH (Diesel Range, C13-C22)	750	J	ug/kg	1010	340	1.	6/17/05	1:13	8015B/CA-LUFTM.	Jarrett	5982
**TPH (GRO C4-C12)	100		ug/kg	100	310	1.	6/15/05	18:43	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	76.5	%					6/14/05	13:35	CLP	A. Runnels	2353

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82808
Sample ID: S-10-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.6 ml	1.0 ml	6/13/05	13:26	K. Turner	3550
Volatile Organics	5.11 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	5.00 g	5.0 ml	6/14/05	16:10	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	82.	56. - 145.
TPH Hi Surr., o-Terphenyl	93.	35. - 135.
VOA Surr, 1,2-DCAd4	86.	72. - 125.
VOA Surr Toluene-d8	88.	80. - 124.
VOA Surr, 4-BFB	88.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82809
Sample ID: S-15-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	6/11/05	11:28	8260B	J. Bundy	2688
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.7	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Tertiary butyl alcohol	716.		ug/kg	46.8	10.7	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Benzene	1.8	J	ug/kg	1.9	0.7	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Ethylbenzene	<1.9		ug/kg	1.9	0.5	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Toluene	1.9		ug/kg	1.9	0.5	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Xylenes (Total)	<1.9		ug/kg	1.9	1.2	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Methyl-t-butyl ether	552.		ug/kg	93.6	42.1	50.	6/11/05	15:48	8260B	J. Bundy	3177
Ethanol	<187.		ug/kg	187.	141.	1.	6/11/05	11:28	8260B	J. Bundy	2688
**Diisopropyl ether	<1.9		ug/kg	1.9	0.7	1.	6/11/05	11:28	8260/SA05-77	J. Bundy	2688
**TPH-GC											
**TPH (Diesel Range, C13-C22)	2770		ug/kg	1000	340	1.	6/16/05	11:08	8015B/CA-LUFTWeatherly		5963
**TPH (GRO C4-C12)	400		ug/kg	100	310	1.	6/15/05	19:12	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	76.4	%					6/14/05	13:35	CLP	A. Runnels	2353

Volatile sample was received in a metal tube.

GRO surrogate recovery elevated due to sample matrix.

ANALYTICAL REPORT

Laboratory Number: 05-A82809

Sample ID: S-15-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	5.34 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	5.02 g	5.0 ml	6/14/05	16:20	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	219. #	56. - 145.
TPH Hi Surr., o-Terphenyl	111.	35. - 135.
VOA Surr, 1,2-DCAd4	85.	72. - 125.
VOA Surr Toluene-d8	104.	80. - 124.
VOA Surr, 4-BFB	98.	25. - 185.
VOA Surr, DBFM	93.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82810
Sample ID: S-20-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.5		ug/kg	1.5	0.5	1.	6/11/05	11:58	8260B	J. Bundy	2688
**tert-methyl amyl ether	<1.5		ug/Kg	1.5	0.6	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Tertiary butyl alcohol	58.4		ug/kg	38.4	8.76	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Benzene	1.8		ug/kg	1.5	0.6	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Ethylbenzene	2.6		ug/kg	1.5	0.4	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Toluene	2.4		ug/kg	1.5	0.4	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Xylenes (Total)	11.1		ug/kg	1.5	1.0	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Methyl-t-butyl ether	253.		ug/kg	76.8	34.6	50.	6/11/05	16:08	8260B	J. Bundy	3177
Ethanol	<154.		ug/kg	154.	116.	1.	6/11/05	11:58	8260B	J. Bundy	2688
**Diisopropyl ether	<1.5		ug/kg	1.5	0.6	1.	6/11/05	11:58	8260/SA05-77	J. Bundy	2688
**TPH-GC											
**TPH (Diesel Range, C13-C22)	4640		ug/kg	1000	340	1.	6/16/05	11:28	8015B/CA-LUFTWeatherly		5963
**TPH (GRO C4-C12)	<100		ug/kg	100	310	1.	6/15/05	19:41	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	84.8		%				6/14/05	13:35	CLP	A. Runnels	2353

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82810
Sample ID: S-20-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	50.0 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	6.51 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	4.99 g	5.0 ml	6/14/05	16:24	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	63.	56. - 145.
TPH Hi Surr., o-Terphenyl	78.	35. - 135.
VOA Surr, 1,2-DCAd4	86.	72. - 125.
VOA Surr Toluene-d8	105.	80. - 124.
VOA Surr, 4-BFB	100.	25. - 185.
VOA Surr, DBFM	93.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82811
Sample ID: S-25-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<2.8		ug/kg	2.8	1.0	1.	6/11/05	12:28	8260B	J. Bundy	2688
**tert-methyl amyl ether	<2.8		ug/Kg	2.8	1.1	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Tertiary butyl alcohol	<69.4		ug/kg	69.4	15.8	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Benzene	6.1		ug/kg	2.8	1.1	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Ethylbenzene	95.1		ug/kg	2.8	0.7	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Toluene	13.8		ug/kg	2.8	0.7	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Xylenes (Total)	165.		ug/kg	2.8	1.8	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Methyl-t-butyl ether	194.		ug/kg	2.8	1.2	1.	6/11/05	12:28	8260B	J. Bundy	2688
Ethanol	<278.		ug/kg	278.	210.	1.	6/11/05	12:28	8260B	J. Bundy	2688
**Diisopropyl ether	<2.8		ug/kg	2.8	1.1	1.	6/11/05	12:28	8260/SA05-77	J. Bundy	2688
**TPH-GC											
**TPH (Diesel Range,C13-C22)	760	J	ug/kg	1000	340	1.	6/16/05	11:48	8015B/CA-LUFT	Weatherly	5963
**TPH (GRO C4-C12)	<100		ug/kg	100	310	1.	6/15/05	20:09	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	94.0	%					6/14/05	13:49	CLP	A. Runnels	2354

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82811
Sample ID: S-25-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	3.60 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	4.95 g	5.0 ml	6/14/05	16:27	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	63.	56. - 145.
TPH Hi Surr., o-Terphenyl	89.	35. - 135.
VOA Surr, 1,2-DCAd4	75.	72. - 125.
VOA Surr Toluene-d8	94.	80. - 124.
VOA Surr, 4-BFB	93.	25. - 185.
VOA Surr, DBFM	87.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82812
Sample ID: S-30-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.8		ug/kg	1.8	0.6	1.	6/11/05	19:34	8260B	J. Bundy	2991
**tert-methyl amyl ether	<1.8		ug/Kg	1.8	0.7	1.	6/11/05	19:34	8260B	J. Bundy	2991
**Tertiary butyl alcohol	21.2	J	ug/kg	43.8	9.98	1.	6/11/05	19:34	8260B	J. Bundy	2991
**Benzene	0.8	J	ug/kg	1.8	0.7	1.	6/12/05	13:11	8260B	J. Adams	3484
**Ethylbenzene	1.2	J	ug/kg	1.8	0.4	1.	6/11/05	19:34	8260B	J. Bundy	2991
**Toluene	1.7	J	ug/kg	1.8	0.4	1.	6/11/05	19:34	8260B	J. Bundy	2991
**Xylenes (Total)	3.6		ug/kg	1.8	1.1	1.	6/12/05	13:11	8260B	J. Adams	3484
**Methyl-t-butyl ether	20.7		ug/kg	1.8	0.8	1.	6/12/05	13:11	8260B	J. Adams	3484
Ethanol	<175.		ug/kg	175.	132.	1.	6/11/05	19:34	8260B	J. Bundy	2991
**Diisopropyl ether	<1.8		ug/kg	1.8	0.7	1.	6/11/05	19:34	8260/SA05-77	J. Bundy	2991
**TPH-GC											
**TPH (Diesel Range, C13-C22)	920	J	ug/kg	1000	340	1.	6/16/05	12:07	8015B/CA-LUFT	Weatherly	5963
**TPH (GRO C4-C12)	<100		ug/kg	100	310	1.	6/15/05	20:38	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	85.4	%					6/14/05	13:49	CLP	A. Runnels	2354

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82812

Sample ID: S-30-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.8 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	5.71 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	5.04 g	5.0 ml	6/14/05	16:30	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	75.	56. - 145.
TPH Hi Surr., o-Terphenyl	93.	35. - 135.
VOA Surr, 1,2-DCAd4	89.	72. - 125.
VOA Surr Toluene-d8	108.	80. - 124.
VOA Surr, 4-BFB	99.	25. - 185.
VOA Surr, DBFM	94.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82813
Sample ID: S-35-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.7		ug/kg	1.7	0.6	1.	6/11/05	20:04	8260B	J. Bundy	2991
**tert-methyl amyl ether	<1.7		ug/Kg	1.7	0.7	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Tertiary butyl alcohol	<43.0		ug/kg	43.0	9.79	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Benzene	1.2	J	ug/kg	1.7	0.7	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Ethylbenzene	1.3	J	ug/kg	1.7	0.4	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Toluene	1.2	J	ug/kg	1.7	0.4	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Xylenes (Total)	<1.7		ug/kg	1.7	1.1	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Methyl-t-butyl ether	8.9		ug/kg	1.7	0.8	1.	6/12/05	13:31	8260B	J. Adams	3484
Ethanol	<172.		ug/kg	172.	130.	1.	6/11/05	20:04	8260B	J. Bundy	2991
**Diisopropyl ether	<1.7		ug/kg	1.7	0.7	1.	6/11/05	20:04	8260/SA05-77	J. Bundy	2991
**TPH-GC											
**TPH (Diesel Range, C13-C22)	440	J	ug/kg	1000	340	1.	6/16/05	12:27	8015B/CA-LUFTWeatherly		5963
**TPH (GRO C4-C12)	<100		ug/kg	100	310	1.	6/15/05	21:06	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	89.4	%					6/14/05	13:49	CLP	A. Runnels	2354

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82813

Sample ID: S-35-B10

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
TPH-D	49.9 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	5.82 g	5.0 ml	6/ 2/05		J. Bundy	5035
BTX Prep	5.00 g	5.0 ml	6/14/05	16:34	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST Surr-Trifluorotoluene	72.	56. - 145.
TPH Hi Surr., o-Terphenyl	109.	35. - 135.
VOA Surr, 1,2-DCAd4	94.	72. - 125.
VOA Surr Toluene-d8	107.	80. - 124.
VOA Surr, 4-BFB	98.	25. - 185.
VOA Surr, DBFM	99.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.

U = Analyte analyzed for but not detected.

= Recovery outside Laboratory historical or method prescribed limits.

J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.

B = Analyte was detected in the method blank.

E = Estimated Value above the calibration limit of the instrument.

All results reported on a wet weight basis.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A82814
Sample ID: S-40-B10
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 6/ 2/05
Time Collected:
Date Received: 6/ 8/05
Time Received: 7:45

Parameter	Result	Flag	Units	Limit of Quantitation	Limit of Detection	Dilution Factor	Date	Time	Method	Analyst	Batch
**Volatile Organics											
**Ethyl-t-butylether	<1.9		ug/kg	1.9	0.7	1.	6/10/05	22:56	8260B	J. Bundy	2374
**tert-methyl amyl ether	<1.9		ug/Kg	1.9	0.7	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Tertiary butyl alcohol	<46.5		ug/kg	46.5	10.6	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Benzene	1.3	J	ug/kg	1.9	0.7	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Ethylbenzene	3.4		ug/kg	1.9	0.5	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Toluene	1.5	J	ug/kg	1.9	0.5	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Xylenes (Total)	6.8		ug/kg	1.9	1.2	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Methyl-t-butyl ether	29.6		ug/kg	1.9	0.8	1.	6/10/05	22:56	8260B	J. Bundy	2374
Ethanol	<186.		ug/kg	186.	140.	1.	6/10/05	22:56	8260B	J. Bundy	2374
**Diisopropyl ether	<1.9		ug/kg	1.9	0.7	1.	6/10/05	22:56	8260/SA05-77	J. Bundy	2374
**TPH-GC											
**TPH (Diesel Range, C13-C22)	1130		ug/kg	1010	340	1.	6/16/05	12:47	8015B/CA-LUFT	Weatherly	5963
**TPH (GRO C4-C12)	110		ug/kg	100	310	1.	6/15/05	21:34	CA-LUFT	D. Otero	5628
**Miscellaneous Parameters											
% Dry Weight	85.1	%					6/14/05	13:49	CLP	A. Runnels	2354

Volatile sample was received in a metal tube.

ANALYTICAL REPORT

Laboratory Number: 05-A82814
Sample ID: S-40-B10

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
TPH-D	49.7 ml	1.0 ml	6/13/05	11:36	K. Turner	3550
Volatile Organics	5.38 g	5.0 ml	6/ 2/05	15:40	J. Bundy	5035
BTX Prep	4.95 g	5.0 ml	6/14/05	16:37	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	93.	56. - 145.
TPH Hi Surr., o-Terphenyl	92.	35. - 135.
VOA Surr, 1,2-DCAd4	78.	72. - 125.
VOA Surr Toluene-d8	91.	80. - 124.
VOA Surr, 4-BFB	87.	25. - 185.
VOA Surr, DBFM	86.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the limit of Quantitation.
 U = Analyte analyzed for but not detected.
 # = Recovery outside Laboratory historical or method prescribed limits.
 J = All results evaluated to the Limit of Detection for reporting. Values below the Limit of Quantitation but above the Limit of Detection are qualified with J as estimated.
 B = Analyte was detected in the method blank.
 E = Estimated Value above the calibration limit of the instrument.
 All results reported on a wet weight basis.

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 1

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
TPH (Diesel Range,C13-C22)	mg/kg	1.13	25.0	40.0	60	28. - 143.	5963	05-A82814
TPH (Diesel Range,C13-C22)	mg/kg	1.13	23.0	40.0	55	28. - 143.	5963	M:05A82814
TPH (Diesel Range,C13-C22)	mg/kg	0.75	17.0	20.0	81	28. - 143.	5982	05-A82808
TPH (Diesel Range,C13-C22)	mg/kg	0.75	17.0	20.0	81	28. - 143.	5982	M:05A82808
TPH (GRO C4-C12)	mg/kg	< 1.00	6.01	10.0	60	52. - 150.	5628	05-A82787
TPH (GRO C4-C12)	mg/kg	< 1.00	6.67	10.0	67	52. - 150.	5628	M:05A82787

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/kg	< 0.0008	0.0382	0.0500	76	53. - 136.	2374	blank
Benzene	mg/kg	< 0.0008	0.0552	0.0500	110	53. - 136.	2374	M:blank
Benzene	mg/kg	< 0.0008	0.0455	0.0500	91	53. - 136.	2688	blank
Benzene	mg/kg	< 0.0008	0.0535	0.0500	107	53. - 136.	2688	M:blank
Benzene	mg/kg	< 0.0008	0.0515	0.0500	103	53. - 136.	2991	blank
Benzene	mg/kg	< 0.0008	0.0572	0.0500	114	53. - 136.	2991	M:blank
Benzene	mg/kg	< 0.0020	0.0522	0.0500	104	53. - 136.	3484	05-A82538
Benzene	mg/kg	< 0.0020	0.0519	0.0500	104	53. - 136.	3484	M:05A82538
Toluene	mg/kg	< 0.0005	0.0346	0.0500	69	43. - 139.	2374	blank
Toluene	mg/kg	< 0.0005	0.0825	0.0500	165#	43. - 139.	2374	M:blank
Toluene	mg/kg	< 0.0005	0.0410	0.0500	82	43. - 139.	2688	blank
Toluene	mg/kg	< 0.0005	0.0469	0.0500	94	43. - 139.	2688	M:blank
Toluene	mg/kg	< 0.0005	0.0471	0.0500	94	43. - 139.	2991	blank
Toluene	mg/kg	< 0.0005	0.0498	0.0500	100	43. - 139.	2991	M:blank
VOA Surr, 1,2-DCAd4	% Rec				80	72. - 125.	2374	
VOA Surr, 1,2-DCAd4	% Rec				80	72. - 125.	2374	
VOA Surr, 1,2-DCAd4	% Rec				79	72. - 125.	2688	
VOA Surr, 1,2-DCAd4	% Rec				78	72. - 125.	2688	
VOA Surr, 1,2-DCAd4	% Rec				95	72. - 125.	3177	

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 2

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch Spike Sample
VOA Surr, 1,2-DCAd4	% Rec				89	72. - 125.	3177
VOA Surr, 1,2-DCAd4	% Rec				89	72. - 125.	3484
VOA Surr, 1,2-DCAd4	% Rec				87	72. - 125.	3484
VOA Surr Toluene-d8	% Rec				91	80. - 124.	2374
VOA Surr Toluene-d8	% Rec				91	80. - 124.	2374
VOA Surr Toluene-d8	% Rec				92	80. - 124.	2688
VOA Surr Toluene-d8	% Rec				90	80. - 124.	2688
VOA Surr Toluene-d8	% Rec				102	80. - 124.	3177
VOA Surr Toluene-d8	% Rec				107	80. - 124.	3177
VOA Surr Toluene-d8	% Rec				103	80. - 124.	3484
VOA Surr Toluene-d8	% Rec				108	80. - 124.	3484
VOA Surr, 4-BFB	% Rec				84	25. - 185.	2374
VOA Surr, 4-BFB	% Rec				86	25. - 185.	2374
VOA Surr, 4-BFB	% Rec				92	25. - 185.	2688
VOA Surr, 4-BFB	% Rec				88	25. - 185.	2688
VOA Surr, 4-BFB	% Rec				102	25. - 185.	3177
VOA Surr, 4-BFB	% Rec				103	25. - 185.	3177
VOA Surr, 4-BFB	% Rec				103	25. - 185.	3484
VOA Surr, 4-BFB	% Rec				100	25. - 185.	3484
VOA Surr, DBFM	% Rec				90	73. - 124.	2374
VOA Surr, DBFM	% Rec				88	73. - 124.	2374
VOA Surr, DBFM	% Rec				87	73. - 124.	2688
VOA Surr, DBFM	% Rec				88	73. - 124.	2688
VOA Surr, DBFM	% Rec				97	73. - 124.	3177
VOA Surr, DBFM	% Rec				93	73. - 124.	3177
VOA Surr, DBFM	% Rec				96	73. - 124.	3484
VOA Surr, DBFM	% Rec				96	73. - 124.	3484

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
TPH (Diesel Range, C13-C22)	mg/kg	25.0	23.0	8.33	51.	5963

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 3

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
TPH (Diesel Range,C13-C22)	mg/kg	17.0	17.0	0.00	51.	5982
TPH (GRO C4-C12)	mg/kg	6.01	6.67	10.41	39.	5628

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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VOA PARAMETERS

Benzene	mg/kg	0.0382	0.0552	36.40#	34.	2374
Benzene	mg/kg	0.0455	0.0535	16.16	34.	2688
Benzene	mg/kg	0.0515	0.0572	10.49	34.	2991
Benzene	mg/kg	0.0522	0.0519	0.58	34.	3484
Toluene	mg/kg	0.0346	0.0825	81.81#	39.	2374
Toluene	mg/kg	0.0410	0.0469	13.42	39.	2688
Toluene	mg/kg	0.0471	0.0498	5.57	39.	2991
VOA Surr, 1,2-DCAd4	% Rec		80.			2374
VOA Surr, 1,2-DCAd4	% Rec		78.			2688
VOA Surr, 1,2-DCAd4	% Rec		89.			3177
VOA Surr, 1,2-DCAd4	% Rec		87.			3484
VOA Surr Toluene-d8	% Rec		91.			2374
VOA Surr Toluene-d8	% Rec		90.			2688
VOA Surr Toluene-d8	% Rec		107.			3177
VOA Surr Toluene-d8	% Rec		108.			3484
VOA Surr, 4-BFB	% Rec		86.			2374
VOA Surr, 4-BFB	% Rec		88.			2688
VOA Surr, 4-BFB	% Rec		103.			3177
VOA Surr, 4-BFB	% Rec		100.			3484
VOA Surr, DBFM	% Rec		88.			2374
VOA Surr, DBFM	% Rec		88.			2688
VOA Surr, DBFM	% Rec		93.			3177
VOA Surr, DBFM	% Rec		96.			3484

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 4

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
UST PARAMETERS						
TPH (Diesel Range,C13-C22)	mg/kg	20.0	16.5	82	54 - 126	5963
TPH (Diesel Range,C13-C22)	mg/kg	20.0	16.8	84	54 - 126	5982
TPH (GRO C4-C12)	mg/kg	10.0	8.45	84	74 - 127	5628

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Ethyl-t-butylether	mg/kg	0.0500	0.0483	97	67 - 137	2374
Ethyl-t-butylether	mg/kg	0.0500	0.0443	89	67 - 137	2688
Ethyl-t-butylether	mg/kg	0.0500	0.0460	92	67 - 137	2991
tert-methyl amyl ether	mg/Kg	0.0500	0.0534	107	64 - 142	2374
tert-methyl amyl ether	mg/Kg	0.0500	0.0493	99	64 - 142	2688
tert-methyl amyl ether	mg/Kg	0.0500	0.0418	84	64 - 142	2991
Tertiary butyl alcohol	mg/kg	0.500	0.401	80	36 - 159	2374
Tertiary butyl alcohol	mg/kg	0.500	0.387	77	36 - 159	2688
Tertiary butyl alcohol	mg/kg	0.500	0.339	68	36 - 159	2991
Benzene	mg/kg	0.0500	0.0537	107	76 - 124	2374
Benzene	mg/kg	0.0500	0.0487	97	76 - 124	2688
Benzene	mg/kg	0.0500	0.0528	106	76 - 124	2991
Benzene	mg/kg	0.0500	0.0522	104	76 - 124	3484
Ethylbenzene	mg/kg	0.0500	0.0559	112	70 - 128	2374
Ethylbenzene	mg/kg	0.0500	0.0429	86	70 - 128	2688
Ethylbenzene	mg/kg	0.0500	0.0482	96	70 - 128	2991
Toluene	mg/kg	0.0500	0.0505	101	72 - 125	2374
Toluene	mg/kg	0.0500	0.0435	87	72 - 125	2688
Toluene	mg/kg	0.0500	0.0477	95	72 - 125	2991
Xylenes (Total)	mg/kg	0.150	0.175	117	71 - 129	2374
Xylenes (Total)	mg/kg	0.150	0.125	83	71 - 129	2688
Xylenes (Total)	mg/kg	0.150	0.139	93	71 - 129	2991

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 5

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Xylenes (Total)	mg/kg	0.150	0.154	103	71 - 129	3484
Methyl-t-butyl ether	mg/kg	0.0500	0.0497	99	67 - 138	2374
Methyl-t-butyl ether	mg/kg	0.0500	0.0470	94	67 - 138	2688
Methyl-t-butyl ether	mg/kg	0.0500	0.0506	101	67 - 138	3177
Methyl-t-butyl ether	mg/kg	0.0500	0.0540	108	67 - 138	3484
Ethanol	mg/kg	5.00	4.32	86	48 - 159	2374
Ethanol	mg/kg	5.00	4.08	82	48 - 159	2688
Ethanol	mg/kg	5.00	3.89	78	48 - 159	2991
Diisopropyl ether	mg/kg	0.0500	0.0470	94	70 - 131	2374
Diisopropyl ether	mg/kg	0.0500	0.0422	84	70 - 131	2688
Diisopropyl ether	mg/kg	0.0500	0.0445	89	70 - 131	2991
VOA Surr, 1,2-DCAd4	% Rec			81	72 - 125	2374
VOA Surr, 1,2-DCAd4	% Rec			80	72 - 125	2688
VOA Surr, 1,2-DCAd4	% Rec			90	72 - 125	3177
VOA Surr, 1,2-DCAd4	% Rec			89	72 - 125	3484
VOA Surr Toluene-d8	% Rec			90	80 - 124	2374
VOA Surr Toluene-d8	% Rec			91	80 - 124	2688
VOA Surr Toluene-d8	% Rec			105	80 - 124	3177
VOA Surr Toluene-d8	% Rec			104	80 - 124	3484
VOA Surr, 4-BFB	% Rec			88	25 - 185	2374
VOA Surr, 4-BFB	% Rec			88	25 - 185	2688
VOA Surr, 4-BFB	% Rec			103	25 - 185	3177
VOA Surr, 4-BFB	% Rec			104	25 - 185	3484
VOA Surr, DBFM	% Rec			91	73 - 124	2374
VOA Surr, DBFM	% Rec			91	73 - 124	2688
VOA Surr, DBFM	% Rec			95	73 - 124	3177
VOA Surr, DBFM	% Rec			94	73 - 124	3484

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
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UST PARAMETERS

TPH (Diesel Range,C13-C22)	0.40	mg/kg	5963	6/16/05	9:49
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PROJECT QUALITY CONTROL DATA

Project Number:

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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
TPH (Diesel Range, C13-C22)	0.52	mg/kg	5982	6/17/05	10:46
TPH (GRO C4-C12)	< 0.31	mg/kg	5628	6/15/05	15:24

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
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UST PARAMETERS

UST surr-Trifluorotoluene	72.	% Recovery	5628	6/15/05	15:24
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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

VOA PARAMETERS

Ethyl-t-butylether	< 0.0007	mg/kg	2374	6/10/05	14:56
Ethyl-t-butylether	< 0.0007	mg/kg	2688	6/11/05	3:27
Ethyl-t-butylether	< 0.0007	mg/kg	2991	6/11/05	16:03
tert-methyl amyl ether	< 0.0008	mg/Kg	2374	6/10/05	14:56
tert-methyl amyl ether	< 0.0008	mg/Kg	2688	6/11/05	3:27
tert-methyl amyl ether	< 0.0008	mg/Kg	2991	6/11/05	16:03
Tertiary butyl alcohol	< 0.0114	mg/kg	2374	6/10/05	14:56
Tertiary butyl alcohol	< 0.0114	mg/kg	2688	6/11/05	3:27
Tertiary butyl alcohol	< 0.0114	mg/kg	2991	6/11/05	16:03
Benzene	< 0.0008	mg/kg	2374	6/10/05	14:56
Benzene	< 0.0008	mg/kg	2688	6/11/05	3:27
Benzene	< 0.0008	mg/kg	2991	6/11/05	16:03
Benzene	< 0.0008	mg/kg	3484	6/12/05	12:52
Ethylbenzene	< 0.0005	mg/kg	2374	6/10/05	14:56
Ethylbenzene	< 0.0005	mg/kg	2688	6/11/05	3:27
Ethylbenzene	< 0.0005	mg/kg	2991	6/11/05	16:03
Toluene	< 0.0005	mg/kg	2374	6/10/05	14:56
Toluene	< 0.0005	mg/kg	2688	6/11/05	3:27

PROJECT QUALITY CONTROL DATA

Project Number:

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Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Toluene	< 0.0005	mg/kg	2991	6/11/05	16:03
Xylenes (Total)	< 0.0013	mg/kg	2374	6/10/05	14:56
Xylenes (Total)	< 0.0013	mg/kg	2688	6/11/05	3:27
Xylenes (Total)	< 0.0013	mg/kg	2991	6/11/05	16:03
Xylenes (Total)	< 0.0013	mg/kg	3484	6/12/05	12:52
Methyl-t-butyl ether	< 0.0009	mg/kg	2374	6/10/05	14:56
Methyl-t-butyl ether	< 0.0009	mg/kg	2688	6/11/05	3:27
Methyl-t-butyl ether	< 0.0009	mg/kg	3177	6/11/05	14:10
Methyl-t-butyl ether	< 0.0009	mg/kg	3484	6/12/05	12:52
Ethanol	< 0.151	mg/kg	2374	6/10/05	14:56
Ethanol	< 0.151	mg/kg	2688	6/11/05	3:27
Ethanol	< 0.151	mg/kg	2991	6/11/05	16:03
Diisopropyl ether	< 0.0008	mg/kg	2374	6/10/05	14:56
Diisopropyl ether	< 0.0008	mg/kg	2688	6/11/05	3:27
Diisopropyl ether	< 0.0008	mg/kg	2991	6/11/05	16:03
VOA Surr, 1,2-DCAd4	82.	% Rec	2374	6/10/05	14:56
VOA Surr, 1,2-DCAd4	79.	% Rec	2688	6/11/05	3:27
VOA Surr, 1,2-DCAd4	92.	% Rec	3177	6/11/05	14:10
VOA Surr, 1,2-DCAd4	97.	% Rec	3484	6/12/05	12:52
VOA Surr Toluene-d8	90.	% Rec	2374	6/10/05	14:56
VOA Surr Toluene-d8	91.	% Rec	2688	6/11/05	3:27
VOA Surr Toluene-d8	105.	% Rec	3177	6/11/05	14:10
VOA Surr Toluene-d8	104.	% Rec	3484	6/12/05	12:52
VOA Surr, 4-BFB	86.	% Rec	2374	6/10/05	14:56
VOA Surr, 4-BFB	88.	% Rec	2688	6/11/05	3:27
VOA Surr, 4-BFB	97.	% Rec	3177	6/11/05	14:10
VOA Surr, 4-BFB	103.	% Rec	3484	6/12/05	12:52
VOA Surr, DBFM	86.	% Rec	2374	6/10/05	14:56
VOA Surr, DBFM	86.	% Rec	2688	6/11/05	3:27
VOA Surr, DBFM	94.	% Rec	3177	6/11/05	14:10
VOA Surr, DBFM	97.	% Rec	3484	6/12/05	12:52

PROJECT QUALITY CONTROL DATA

Project Number:

Page: 8

= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 418965

Nashville Division

COOLER RECEIPT FORM

BC#



Client Name : ERT

Cooler Received/Opened On: 6/09/05 ^{Size 6/8/05} Accessioned By: Shawn Gracey

Log-in Personnel Signature [Signature]

1. Temperature of Cooler when triaged: 102 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
a. If yes, how many, and where: 11 Front
3. Were custody seals on containers?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
5. Were custody papers inside cooler?..... YES...NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert
Ziplock Baggies Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA
b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA

If not, record standard ID of preservative used here _____

17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:
33361 3370

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:

- times missing from
COC.

TA Account #: 10203

Invoice To: ExxonMobil

Report To: _____ **George Salley**

PO #: 2800 ~~Pending~~ 4506123986

Facility ID # Mobil Station 18MLJ

Site Address 5005 N. Long Beach Blvd.

City, State, Zip Long Beach, CA

Regulatory District (CA) SCRWQCB

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix						Analyze For:																												
							Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	HNO ₃ (Red Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	TPH/Diesel	TPH/GAS-CAL LUFT	FULL SCAN 8260B + OXYGENATES	METHANOL	ETHANOL	*8260B/BTEX + OXYGENATES ONLY	BTEX/MTBE BY 8021	8010	REDOX POTENTIAL	NITRATE/SULFATE	METHANE(8015)	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	Fax Results (yes or no)	Due Date of Report													
S-5-BIO ✓	6/2/05		4	X			X	X								X	X			X	X																											
S-10-BIO ✓																																																
S-15-BIO ✓																																																
S-20-BIO ✓																																																
S-25-BIO ✓																																																
S-30-BIO ✓																																																
S-35-BIO ✓																																																
S-40-BIO ✓																																																
Comments/Special Instructions:							Laboratory Comments:																																									
5 DAY TURN-AROUND FOR EXXONMOBIL REQUIRED							CONSULTANT ID # ERIL GLOBAL ID #							"PLEASE E-MAIL ALL EDF FILES TO RSHEARER@ERI-US.COM"							Temperature Upon Receipt: 0.0																											
																					Sample Containers Intact? Y N																											
Relinquished by: <i>Russell Pace</i>							Date: 6/2/05 Time: 1315 Received by: <i>N. Waterbury</i>							Date: 6/2/05 Time: 1315							VOCs Free of Headspace? Y N																											
																					QC Deliverables (please circle one) Level 2 Level 3 Level 4																											
Relinquished by:							Date:							Time:							Received by (Lab personnel):							Date:							Time:							Site Specific-if yes, please pre-schedule w/ TestAmerica						
																																										Project Manager or attach specific instructions						

6/10/05

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 18-MLJ
Project Number: .
Laboratory Project Number: 418246.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Sample Identification	Lab Number	Page 1 Collection Date
-----	-----	-----
S-10-B11	05-A79547	5/31/05
S-15-B11	05-A79548	5/31/05
S-20-B11	05-A79549	5/31/05
S-25-B11	05-A79550	5/31/05
S-30-B11	05-A79551	5/31/05
S-35-B11	05-A79552	5/31/05
S-40-B11	05-A79553	5/31/05

Sample Identification

Lab Number

Page 2

Collection Date

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By:

Roxanne L Connor

Report Date: 6/10/05

Johnny A. Mitchell, Laboratory Director
Michael H. Dunn, M.S., Technical Director
Pamela A. Langford, Senior Project Manager
Eric S. Smith, QA/QC Director
Sandra McMillin, Technical Services

Gail A. Lage, Senior Project Manager
Glenn L. Norton, Technical Services
Kelly S. Comstock, Technical Services
Roxanne L. Connor, Senior Project Manager

Laboratory Certification Number: 01168CA

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ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79547
Sample ID: S-10-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 10:35
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

U8

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	79.5	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	11:24	H. Wagner	CL-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Tertiary butyl alcohol	51.6	ug/kg	41.1	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Benzene	7.3	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Toluene	5.8	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Xylenes (Total)	10.3	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Methyl-t-butyl ether	666.	ug/kg	82.2	50.0	6/ 8/05	13:18	J. Yun	8260B	9340
Ethanol	ND	ug/kg	164.	1.0	6/ 8/05	1:30	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	1.6	1.0	6/ 8/05	1:30	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79547
Sample ID: S-10-B11
Project:
Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	6.08 g	5.0 ml	5/31/05	10:35	N. Noman	5035
BTX Prep	4.98 g	5.0 ml	6/ 7/05	10:54	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	101.	56. - 145.
VOA Surr, 1,2-DCAd4	97.	72. - 125.
VOA Surr Toluene-d8	98.	80. - 124.
VOA Surr, 4-BFB	102.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
= Recovery outside Laboratory historical or method prescribed limits.
** = NELAC E87358 Certified Analyte
All results reported on a wet weight basis.
Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79548
Sample ID: S-15-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 10:40
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	77.1	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	11:56	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	42.1	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Benzene	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Toluene	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Xylenes (Total)	25.1	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Methyl-t-butyl ether	168.	ug/kg	84.2	50.0	6/ 8/05	13:38	J. Yun	8260B	9340
Ethanol	ND	ug/kg	168.	1.0	6/ 8/05	2:00	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	1.7	1.0	6/ 8/05	2:00	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79548

Sample ID: S-15-B11

Project:

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	5.94 g	5.0 ml	5/31/05	10:40	N. Noman	5035
BTX Prep	5.02 g	5.0 ml	6/ 7/05	10:57	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	102.	56. - 145.
VOA Surr, 1,2-DCAd4	95.	72. - 125.
VOA Surr Toluene-d8	99.	80. - 124.
VOA Surr, 4-BFB	98.	25. - 185.
VOA Surr, DBPM	86.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte

All results reported on a wet weight basis.

Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79549
Sample ID: S-20-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 10:55
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	88.1	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	12:27	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	38.3	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Benzene	ND	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Toluene	ND	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Xylenes (Total)	2.9	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Methyl-t-butyl ether	27.4	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
Ethanol	ND	ug/kg	153.	1.0	6/ 8/05	2:30	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	1.5	1.0	6/ 8/05	2:30	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79549

Sample ID: S-20-B11

Project:

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	6.53 g	5.0 ml	5/31/05	10:55	N. Noman	5035
BTX Prep	5.01 g	5.0 ml	6/ 7/05	11:00	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	99.	56. - 145.
VOA Surr, 1,2-DCAd4	91.	72. - 125.
VOA Surr Toluene-d8	95.	80. - 124.
VOA Surr, 4-BFB	98.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte

All results reported on a wet weight basis.

Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79550
Sample ID: S-25-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 11:00
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	87.1	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	12:59	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	43.9	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Benzene	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Toluene	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Xylenes (Total)	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Methyl-t-butyl ether	15.4	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
Ethanol	ND	ug/kg	175.	1.0	6/ 8/05	3:00	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	1.8	1.0	6/ 8/05	3:00	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79550
Sample ID: S-25-B11
Project:
Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	5.70 g	5.0 ml	5/31/05	11:00	N. Noman	5035
BTX Prep	5.02 g	5.0 ml	6/ 7/05	11:02	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	99.	56. - 145.
VOA Surr, 1,2-DCAd4	88.	72. - 125.
VOA Surr Toluene-d8	96.	80. - 124.
VOA Surr, 4-BFB	99.	25. - 185.
VOA Surr, DBFM	86.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
= Recovery outside Laboratory historical or method prescribed limits.
** = NELAC E87358 Certified Analyte
All results reported on a wet weight basis.
Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79551
Sample ID: S-30-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 11:15
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	93.1	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	13:31	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	43.4	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Benzene	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Toluene	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Xylenes (Total)	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Methyl-t-butyl ether	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
Ethanol	ND	ug/kg	174.	1.0	6/ 8/05	3:30	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	1.7	1.0	6/ 8/05	3:30	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79551

Sample ID: S-30-B11

Project:

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	5.76 g	5.0 ml	5/31/05	11:15	N. Noman	5035
BTX Prep	4.98 g	5.0 ml	6/ 7/05	11:05	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	100.	56. - 145.
VOA Surr, 1,2-DCAd4	91.	72. - 125.
VOA Surr Toluene-d8	95.	80. - 124.
VOA Surr, 4-BFB	94.	25. - 185.
VOA Surr, DBFM	90.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

= Recovery outside Laboratory historical or method prescribed limits.

** = NELAC E87358 Certified Analyte

All results reported on a wet weight basis.

Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79552
Sample ID: S-35-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 11:20
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	86.0	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	14:03	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	49.2	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Benzene	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Toluene	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Xylenes (Total)	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Methyl-t-butyl ether	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
Ethanol	ND	ug/kg	197.	1.0	6/ 8/05	4:01	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	2.0	1.0	6/ 8/05	4:01	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79552
Sample ID: S-35-B11
Project:
Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	5.08 g	5.0 ml	5/31/05	11:20	N. Noman	5035
BTX Prep	4.99 g	5.0 ml	6/ 7/05	11:08	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	100.	56. - 145.
VOA Surr, 1,2-DCAd4	86.	72. - 125.
VOA Surr Toluene-d8	97.	80. - 124.
VOA Surr, 4-BFB	95.	25. - 185.
VOA Surr, DBFM	88.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
= Recovery outside Laboratory historical or method prescribed limits.
** = NELAC E87358 Certified Analyte
All results reported on a wet weight basis.
Volatile sample was received in a metal tube.

End of Sample Report.

ANALYTICAL REPORT

ENVIRONMENTAL RESOLUTIONS, INC 10203
George Salley
20372 NORTH SEA CIRCLE
LAKE FOREST, CA 92630

Lab Number: 05-A79553
Sample ID: S-40-B11
Sample Type: Soil
Site ID: 18-MLJ

Project:
Project Name: EXXONMOBIL 18-MLJ
Sampler: RUSSELL PACE

Date Collected: 5/31/05
Time Collected: 11:30
Date Received: 6/ 2/05
Time Received: 7:50
Page: 1

Purchase Order: 4506125986

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	84.8	%		1.0	6/ 8/05	14:47	K. Turner	CLP	4884
ORGANIC PARAMETERS									
**TPH (GRO C4-C12)	ND	ug/kg	1000	1.0	6/ 9/05	15:10	H. Wagner	CA-LUFT	9127
VOLATILE ORGANICS									
**Ethyl-t-butylether	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**tert-methyl amyl ether	ND	ug/Kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Tertiary butyl alcohol	ND	ug/kg	49.3	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Benzene	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Ethylbenzene	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Toluene	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Xylenes (Total)	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Methyl-t-butyl ether	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
Ethanol	ND	ug/kg	197.	1.0	6/ 8/05	4:31	J. Adams	8260B	9337
**Diisopropyl ether	ND	ug/kg	2.0	1.0	6/ 8/05	4:31	J. Adams	8260/SA05-77	9337

Sample report continued . . .

ANALYTICAL REPORT

Laboratory Number: 05-A79553
Sample ID: S-40-B11
Project:
Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
Volatile Organics	5.07 g	5.0 ml	5/31/05	11:30	N. Noman	5035
BTX Prep	5.02 g	5.0 ml	6/ 7/05	11:11	H. Wagner	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	128.	56. - 145.
VOA Surr, 1,2-DCAd4	82.	72. - 125.
VOA Surr Toluene-d8	95.	80. - 124.
VOA Surr, 4-BFB	95.	25. - 185.
VOA Surr, DBFM	86.	73. - 124.

LABORATORY COMMENTS:

ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
= Recovery outside Laboratory historical or method prescribed limits.
** = NELAC E87358 Certified Analyte
All results reported on a wet weight basis.
Volatile sample was received in a metal tube.

End of Sample Report.

PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 18-MLJ

Page: 1

Laboratory Receipt Date: 6/ 2/05

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----
VOA PARAMETERS								
Benzene	mg/kg	< 0.0008	0.0525	0.0500	105	53 - 136	9337	blank
Toluene	mg/kg	< 0.0005	0.0505	0.0500	101	43 - 139	9337	blank
VOA Surr, 1,2-DCAd4	% Rec				82	72 - 125	9337	
VOA Surr Toluene-d8	% Rec				93	80 - 124	9337	
VOA Surr, 4-BFB	% Rec				90	25 - 185	9337	
VOA Surr, DBFM	% Rec				91	73 - 124	9337	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
VOA PARAMETERS						
Benzene	mg/kg	0.0525	0.0481	8.75	34.	9337
Toluene	mg/kg	0.0505	0.0451	11.30	39.	9337
VOA Surr, 1,2-DCAd4	% Rec		84.			9337
VOA Surr Toluene-d8	% Rec		93.			9337
VOA Surr, 4-BFB	% Rec		92.			9337
VOA Surr, DBFM	% Rec		93.			9337

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 18-MLJ

Page: 2

Laboratory Receipt Date: 6/ 2/05

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch

UST PARAMETERS						
TPH (GRO C4-C12)	mg/kg	10.0	9.58	96	74 - 127	9127
VOA PARAMETERS						
Ethyl-t-butylether	mg/kg	0.0500	0.0525	105	67 - 137	9337
tert-methyl amyl ether	mg/Kg	0.0500	0.0526	105	64 - 142	9337
Tertiary butyl alcohol	mg/kg	0.500	0.499	100	36 - 159	9337
Benzene	mg/kg	0.0500	0.0523	105	76 - 124	9337
Ethylbenzene	mg/kg	0.0500	0.0500	100	70 - 128	9337
Toluene	mg/kg	0.0500	0.0512	102	72 - 125	9337
Xylenes (Total)	mg/kg	0.150	0.144	96	71 - 129	9337
Methyl-t-butyl ether	mg/kg	0.0500	0.0535	107	67 - 138	9337
Methyl-t-butyl ether	mg/kg	0.0500	0.0456	91	67 - 138	9340
Ethanol	mg/kg	5.00	5.36	107	48 - 159	9337
Diisopropyl ether	mg/kg	0.0500	0.0504	101	70 - 131	9337
VOA Surr, 1,2-DCAd4	% Rec			87	72 - 125	9337
VOA Surr, 1,2-DCAd4	% Rec			99	72 - 125	9340
VOA Surr Toluene-d8	% Rec			95	80 - 124	9337
VOA Surr Toluene-d8	% Rec			100	80 - 124	9340
VOA Surr, 4-BFB	% Rec			94	25 - 185	9337
VOA Surr, 4-BFB	% Rec			103	25 - 185	9340
VOA Surr, DBFM	% Rec			92	73 - 124	9337
VOA Surr, DBFM	% Rec			87	73 - 124	9340

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: **EXXONMOBIL 18-MLJ**

Page: 3

Laboratory Receipt Date: 6/ 2/05

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
-----	-----	-----	-----	-----	-----	-----	-----

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

UST PARAMETERS

TPH (GRO C4-C12)	< 0.31	mg/kg	9127	6/ 9/05	10:38
UST surr-Trifluorotoluene	100.	% Recovery	9127	6/ 9/05	10:38

VOA PARAMETERS

Ethyl-t-butylether	< 0.0007	mg/kg	9337	6/ 7/05	22:29
tert-methyl amyl ether	< 0.0008	mg/Kg	9337	6/ 7/05	22:29
Tertiary butyl alcohol	< 0.0114	mg/kg	9337	6/ 7/05	22:29
Benzene	< 0.0008	mg/kg	9337	6/ 7/05	22:29
Ethylbenzene	< 0.0005	mg/kg	9337	6/ 7/05	22:29
Toluene	< 0.0005	mg/kg	9337	6/ 7/05	22:29
Xylenes (Total)	< 0.0013	mg/kg	9337	6/ 7/05	22:29
Methyl-t-butyl ether	< 0.0009	mg/kg	9337	6/ 7/05	22:29
Methyl-t-butyl ether	< 0.0009	mg/kg	9340	6/ 8/05	11:59
Ethanol	< 0.151	mg/kg	9337	6/ 7/05	22:29
Diisopropyl ether	< 0.0008	mg/kg	9337	6/ 7/05	22:29

Project QC continued . . .

PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 18-MLJ

Page: 4

Laboratory Receipt Date: 6/ 2/05

VOA Surr, 1,2-DCAd4	87.	% Rec	9337	6/ 7/05	22:29
VOA Surr, 1,2-DCAd4	103.	% Rec	9340	6/ 8/05	11:59
VOA Surr Toluene-d8	98.	% Rec	9337	6/ 7/05	22:29
VOA Surr Toluene-d8	101.	% Rec	9340	6/ 8/05	11:59
VOA Surr, 4-BFB	96.	% Rec	9337	6/ 7/05	22:29
VOA Surr, 4-BFB	99.	% Rec	9340	6/ 8/05	11:59
VOA Surr, DBFM	88.	% Rec	9337	6/ 7/05	22:29
VOA Surr, DBFM	89.	% Rec	9340	6/ 8/05	11:59

= Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 418246



Nashville Division


COOLER RECEIPT FORM

BC#



Client Name : ERI

Cooler Received/Opened On: 6/2/05 Accessioned By: James D. Jacobs


Log-in Personnel Signature

1. Temperature of Cooler when triaged: 3.6 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES ☒ NO ☐ NA ☐
 - a. If yes, how many and where: 1 Front
3. Were custody seals on containers?..... NO ☒ YES ☐ NA ☐
4. Were the seals intact, signed, and dated correctly?..... YES ☒ NO ☐ NA ☐
5. Were custody papers inside cooler?..... YES ☒ NO ☐ NA ☐
6. Were custody papers properly filled out (ink, signed, etc)?..... YES ☒ NO ☐ NA ☐
7. Did you sign the custody papers in the appropriate place?..... YES ☒ NO ☐ NA ☐
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert
Ziplock baggies Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)?..... YES ☒ NO ☐ NA ☐
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES ☒ NO ☐ NA ☐
12. Did all container labels and tags agree with custody papers?..... YES ☒ NO ☐ NA ☐
13. Were correct containers used for the analysis requested?..... YES ☒ NO ☐ NA ☐
14. a. Were VOA vials received?..... YES ☒ NO ☐ NA ☐
 - b. Was there any observable head space present in any VOA vial?..... NO ☐ YES ☒ NA ☐
15. Was sufficient amount of sample sent in each container?..... YES ☒ NO ☐ NA ☐
16. Were correct preservatives used?..... YES ☒ NO ☐ NA ☐

If not, record standard ID of preservative used here _____

17. Was residual chlorine present?..... NO ☐ YES ☒ NA ☐

18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:

3233

Fed-Ex

UPS

Velocity

DHL

Route

Off-street

Misc.

19. If a Non-Conformance exists, see attached or comments below:



Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

418246

ExxonMobil

Consultant Name: Environmental Resolutions, Inc.

TA Account #: 10203

Address: 20372 North Sea Circle

Invoice To: ExxonMobil

City/State/Zip: Lake Forest, CA 92630

Report To: George Salley

ExxonMobil Territory Mgr: Marla Guensler

PO #: 2005 - Pending 4506125486

Consultant Project Mgr: George Salley

Facility ID #: Mobil Station 18MLJ

Consultant Telephone Number: 949-457-8950

Fax No.: 949-457-8956

Site Address: 5005 N. Long Beach Blvd.

Sampler Name: (Print) Russell Pace

City, State, Zip: Long Beach, CA

Sampler Signature: Russell Pace

Regulatory District (CA) SCRWQCB

Sample ID or Field ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix					Analyze For:										RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	Fax Results (yes or no)	Due Date of Report		
							Methanol	Sodium Bisulfate	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	HNO ₃ (Red Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	TPH/GAS-CAL LUFT	FULL SCAN 8260B +OXYGENATES	METHANOL	ETHANOL	*8260B/BTEX +OXYGENATES ONLY	BTEX/MTBE BY 8021	8010	REDOX POTENTIAL					NITRATE/SULFATE	METHANE(8015)
S - 10 - B11	5/31/05	1035	4	X			X	X											X			X						79	54	7		X		
S - 15 - B11		1040																											54	8				
S - 20 - B11		1055																											54	9				
S - 25 - B11		1100																											55	0				
S - 30 - B11		1115																											55	1				
S - 35 - B11		1120																											55	2				
S - 40 - B11		1130																											79	55	3			

Comments/Special Instructions:

5 DAY TURN-AROUND FOR
EXXONMOBIL REQUIRED

CONSULTANT ID # ERIL
GLOBAL ID #

"PLEASE E-MAIL ALL EDF FILES TO
RSHEARER@ERI-US.COM"

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by (Lab personnel)

Date

Time

Laboratory Comments:

Temperature Upon Receipt: 3.62

Sample Containers Intact? ☒ N

VOCs Free of Headspace? Y N

QC Deliverables (please circle one)

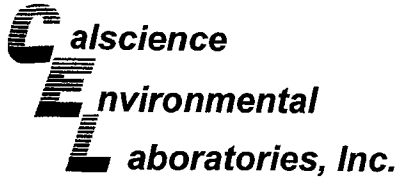
Level 2

Level 3

Level 4

Site Specific-if yes, please pre-schedule w/ TestAmerica

Project Manager or attach specific instructions

**ORIGINAL**

July 11, 2005

George Salley
Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Subject: **Calscience Work Order No.: 05-07-0236**
Client Reference: **ExxonMobil 18-MLJ**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/6/2005 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

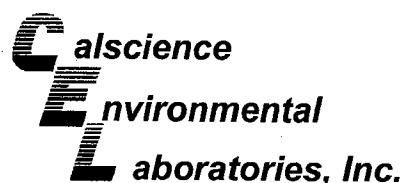
Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in cursive script that reads "Cecil L. de Guina for".

Calscience Environmental
Laboratories, Inc.
Don Burley
Project Manager



Analytical Report



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Date Received: 07/06/05
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-3(M)

Project: ExxonMobil 18-MLJ

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
I-SVE1D-A	05-07-0236-1	07/06/05	Air	N/A	07/07/05	050707L01

Parameter	Result	RL	DF	Qual	Units
C6-C12	16000	500	50		ppmv

I-SVE1D-B	05-07-0236-2	07/06/05	Air	N/A	07/07/05	050707L01
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Parameter	Result	RL	DF	Qual	Units
C6-C12	17000	500	50		ppmv

I-SVE1S-A	05-07-0236-3	07/06/05	Air	N/A	07/07/05	050707L01
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Parameter	Result	RL	DF	Qual	Units
C6-C12	820	25	2.5		ppmv

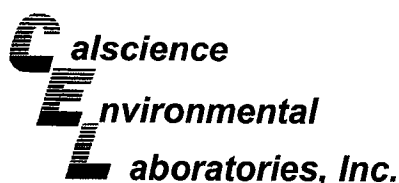
I-SVE1S-B	05-07-0236-4	07/06/05	Air	N/A	07/07/05	050707L01
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Parameter	Result	RL	DF	Qual	Units
C6-C12	960	25	2.5		ppmv

Method Blank	098-01-006-87	N/A	Air	N/A	07/07/05	050707L01
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Parameter	Result	RL	DF	Qual	Units
C6-C12	ND	10	1		ppmv

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

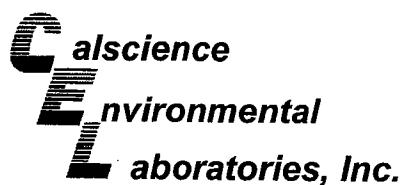
Date Received: 07/06/05
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-15M
Units: ppm (v/v)

Project: ExxonMobil 18-MLJ

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID			
I-SVE1D-A	05-07-0236-1	07/06/05	Air	N/A	07/08/05	050708L01			
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	23	1	3500		Methyl-t-Butyl Ether (MTBE)	17	7	3500	
Toluene	31	1	3500		Tert-Butyl Alcohol (TBA)	ND	7.0	3500	
Ethylbenzene	37	1	3500		Diisopropyl Ether (DIPE)	ND	7.0	3500	
p/m-Xylene	40	3	3500		Ethyl-t-Butyl Ether (ETBE)	ND	7.0	3500	
o-Xylene	13	1	3500		Tert-Amyl-Methyl Ether (TAME)	ND	7.0	3500	
I-SVE1D-B	05-07-0236-2	07/06/05	Air	N/A	07/08/05	050708L01			
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	32	1	3000		Methyl-t-Butyl Ether (MTBE)	110	60	30000	
Toluene	120	1	3000		Tert-Butyl Alcohol (TBA)	ND	6.0	3000	
Ethylbenzene	56	1	3000		Diisopropyl Ether (DIPE)	ND	6.0	3000	
p/m-Xylene	96	3	3000		Ethyl-t-Butyl Ether (ETBE)	ND	6.0	3000	
o-Xylene	28	1	3000		Tert-Amyl-Methyl Ether (TAME)	ND	6.0	3000	
I-SVE1S-A	05-07-0236-3	07/06/05	Air	N/A	07/08/05	050708L01			
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.47	0.13	250		Methyl-t-Butyl Ether (MTBE)	9.1	0.5	250	
Toluene	5.1	0.1	250		Tert-Butyl Alcohol (TBA)	8.0	0.5	250	
Ethylbenzene	3.3	0.1	250		Diisopropyl Ether (DIPE)	ND	0.50	250	
p/m-Xylene	6.0	0.2	250		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	250	
o-Xylene	3.3	0.1	250		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	250	
I-SVE1S-B	05-07-0236-4	07/06/05	Air	N/A	07/08/05	050708L01			
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.54	0.11	225		Methyl-t-Butyl Ether (MTBE)	24	4	2250	
Toluene	1.9	0.1	225		Tert-Butyl Alcohol (TBA)	7.7	0.4	225	
Ethylbenzene	1.7	0.1	225		Diisopropyl Ether (DIPE)	ND	0.45	225	
p/m-Xylene	2.7	0.2	225		Ethyl-t-Butyl Ether (ETBE)	ND	0.45	225	
o-Xylene	1.2	0.1	225		Tert-Amyl-Methyl Ether (TAME)	ND	0.45	225	
Method Blank	097-09-002-3,919	N/A	Air	N/A	07/08/05	050708L01			
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Toluene	ND	0.00050	1		Tert-Butyl Alcohol (TBA)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
p/m-Xylene	ND	0.0010	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
o-Xylene	ND	0.00050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Date Received: 07/06/05
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-15M
Units: ppm (v/v)

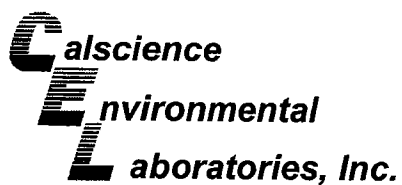
Project: ExxonMobil 18-MLJ

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-09-002-3,921	N/A	Air	N/A	07/09/05	050709L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Toluene	ND	0.00050	1		Tert-Butyl Alcohol (TBA)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
p/m-Xylene	ND	0.0010	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
o-Xylene	ND	0.00050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Duplicate



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

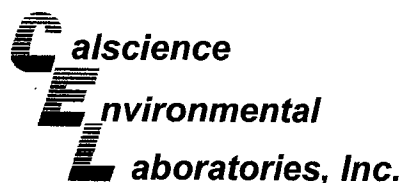
Date Received: 07/06/05
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-3(M)

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
I-SVE1D-A	Air	GC 19	N/A	07/07/05	050707D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
C6-C12	16000	16000	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

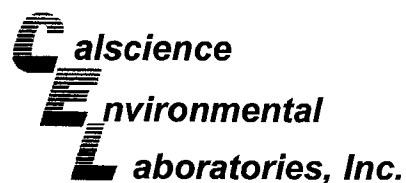
Date Received: N/A
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-15M

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-3,919	Air	GC/MS K	N/A	07/08/05	050708L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	99	61-121	2	0-37	
Toluene	106	104	60-120	2	0-39	
Ethylbenzene	110	108	61-127	2	0-38	
p/m-Xylene	114	112	57-129	2	0-39	
o-Xylene	114	112	58-130	2	0-38	
Methyl-t-Butyl Ether (MTBE)	106	103	45-147	3	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

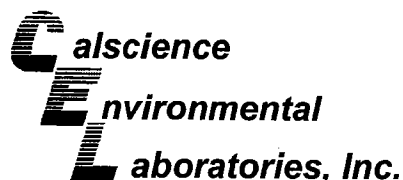
Date Received: N/A
Work Order No: 05-07-0236
Preparation: N/A
Method: EPA TO-15M

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-3,921	Air	GC/MS K	N/A	07/09/05	050709L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	100	61-121	1	0-37	
Toluene	103	105	60-120	1	0-39	
Ethylbenzene	105	108	61-127	2	0-38	
p/m-Xylene	110	113	57-129	2	0-39	
o-Xylene	110	112	58-130	2	0-38	
Methyl-t-Butyl Ether (MTBE)	96	102	45-147	6	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Glossary of Terms and Qualifiers



Work Order Number: 05-07-0236

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

A handwritten signature in black ink, appearing to be 'M. J. ...'.



WORK ORDER #:

05 - 07 - 0236

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Exxon Mobil oilDATE: 7/6/05

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.
☐ Chilled, cooler without temperature blank.
☐ Chilled and placed in cooler with wet ice.
☐ Ambient and placed in cooler with wet ice.
☐ Ambient temperature.
☐ °C Temperature blank.

LABORATORY (Other than CalScience Courier):

- ☐ °C Temperature blank.
☐ °C IR thermometer.
☒ Ambient temperature.

Initial: vl

CUSTODY SEAL INTACT:

 Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ☒
Initial: vl

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: vl

COMMENTS:

TEL: (714) 895-5494 • FAX: (714) 894-7501

Page 1 of 109/10/01 Revision



July 11, 2005

George Salley
Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Subject: **Calscience Work Order No.: 05-07-0340**
Client Reference: **ExxonMobil 18-MLJ**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/7/2005 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

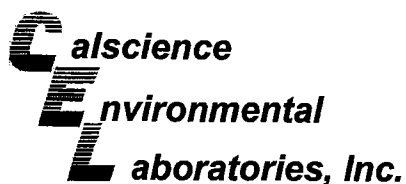
Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Cecile L. de Suiza for

Calscience Environmental
Laboratories, Inc.
Don Burley
Project Manager



Analytical Report



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Date Received: 07/07/05
Work Order No: 05-07-0340
Preparation: N/A
Method: EPA TO-3(M)

Project: ExxonMobil 18-MLJ

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
I-SVE COMB-A	05-07-0340-1	07/07/05	Air	N/A	07/08/05	050708L01

Parameter	Result	RL	DF	Qual	Units
C6-C12	9800	200	20		ppmv

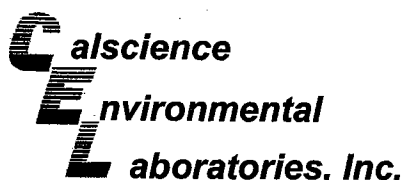
I-SVE COMB-B	05-07-0340-2	07/07/05	Air	N/A	07/08/05	050708L01
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Parameter	Result	RL	DF	Qual	Units
C6-C12	7000	200	20		ppmv

Method Blank	098-01-006-88	N/A	Air	N/A	07/08/05	050708L01
--------------	---------------	-----	-----	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
C6-C12	ND	10	1		ppmv

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Date Received: 07/07/05
Work Order No: 05-07-0340
Preparation: N/A
Method: EPA TO-15M
Units: ppm (v/v)

Project: ExxonMobil 18-MLJ

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
I-SVE COMB-A	05-07-0340-1	07/07/05	Air	N/A	07/09/05	050709L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	9.6	1.3	2500		Methyl-t-Butyl Ether (MTBE)	81	5	2500	
Toluene	80	1	2500		Tert-Butyl Alcohol (TBA)	ND	5.0	2500	
Ethylbenzene	56	1	2500		Diisopropyl Ether (DIPE)	ND	5.0	2500	
p/m-Xylene	79	2	2500		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	2500	
o-Xylene	49	1	2500		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	2500	

I-SVE COMB-B	05-07-0340-2	07/07/05	Air	N/A	07/09/05	050708L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	13	0.75	1500		Methyl-t-Butyl Ether (MTBE)	140	30	15000	
Toluene	85	7	15000		Tert-Butyl Alcohol (TBA)	3.9	3.0	1500	
Ethylbenzene	49	0.75	1500		Diisopropyl Ether (DIPE)	ND	3.0	1500	
p/m-Xylene	76	1	1500		Ethyl-t-Butyl Ether (ETBE)	ND	3.0	1500	
o-Xylene	41	0.75	1500		Tert-Amyl-Methyl Ether (TAME)	ND	3.0	1500	

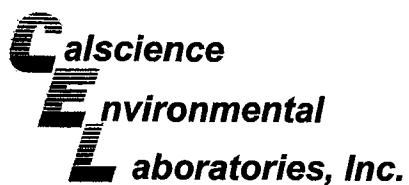
Method Blank	097-09-002-3,919	N/A	Air	N/A	07/08/05	050708L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Toluene	ND	0.00050	1		Tert-Butyl Alcohol (TBA)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
p/m-Xylene	ND	0.0010	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
o-Xylene	ND	0.00050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	

Method Blank	097-09-002-3,921	N/A	Air	N/A	07/09/05	050709L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.00050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0020	1	
Toluene	ND	0.00050	1		Tert-Butyl Alcohol (TBA)	ND	0.0020	1	
Ethylbenzene	ND	0.00050	1		Diisopropyl Ether (DIPE)	ND	0.0020	1	
p/m-Xylene	ND	0.0010	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.0020	1	
o-Xylene	ND	0.00050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.0020	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Duplicate



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20372 North Sea Circle
Lake Forest, CA 92630-8806

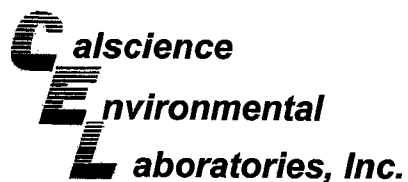
Date Received: 07/07/05
Work Order No: 05-07-0340
Preparation: N/A
Method: EPA TO-3(M)

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
I-SVE COMB-A	Air	GC 19	N/A	07/08/05	050708D01

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
C6-C12	9800	10000	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



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Lake Forest, CA 92630-8806

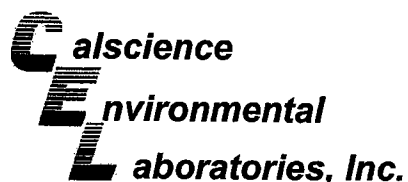
Date Received: N/A
Work Order No: 05-07-0340
Preparation: N/A
Method: EPA TO-15M

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-3,919	Air	GC/MS K	N/A	07/08/05	050708L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	99	61-121	2	0-37	
Toluene	106	104	60-120	2	0-39	
Ethylbenzene	110	108	61-127	2	0-38	
p/m-Xylene	114	112	57-129	2	0-39	
o-Xylene	114	112	58-130	2	0-38	
Methyl-t-Butyl Ether (MTBE)	106	103	45-147	3	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Environmental Resolutions, Inc.
20372 North Sea Circle
Lake Forest, CA 92630-8806

Date Received: N/A
Work Order No: 05-07-0340
Preparation: N/A
Method: EPA TO-15M

Project: ExxonMobil 18-MLJ

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-09-002-3,921	Air	GC/MS K	N/A	07/09/05	050709L01

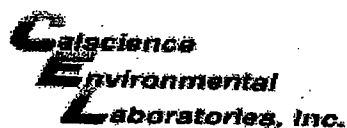
Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	100	61-121	1	0-37	
Toluene	103	105	60-120	1	0-39	
Ethylbenzene	105	108	61-127	2	0-38	
p/m-Xylene	110	113	57-129	2	0-39	
o-Xylene	110	112	58-130	2	0-38	
Methyl-t-Butyl Ether (MTBE)	96	102	45-147	6	0-25	

RPD - Relative Percent Difference, CL - Control Limit

Work Order Number: 05-07-0340

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.





WORK ORDER #:

05 - 07 - 0340

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Exxon Mobil

DATE: 7/7/05

TEMPERATURE -- SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ☐ Chilled, cooler with temperature blank provided.
☐ Chilled, cooler without temperature blank.
☐ Chilled and placed in cooler with wet ice.
☐ Ambient and placed in cooler with wet ice.
☐ Ambient temperature.
☐ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ☐ °C Temperature blank.
☐ °C IR thermometer.
☒ Ambient temperature.

Initial: [Signature]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact): _____ Not Applicable (N/A): ☒

Initial: [Signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>		
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>		
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>		
Correct containers for analyses requested.....	<input checked="" type="checkbox"/>		
Proper preservation noted on sample label(s).....			<input checked="" type="checkbox"/>
VOA vial(s) free of headspace.....			<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input checked="" type="checkbox"/>		

Initial: [Signature]

COMMENTS:

